



Business Operating Model Design for Tennessee Eligibility Modernization Project

STATE OF TENNESSEE DIVISION OF HEALTH CARE FINANCE & ADMINISTRATION
TN Technical Advisory Services for Medicaid Modernization Program

03/24/2016
Version 3.0

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	10
1.1	PROJECT BACKGROUND	10
1.2	CURRENT STATE CHALLENGES RESOLVED IN FUTURE STATE.....	10
1.3	SUMMARY OF TEDS PROJECT OVERALL GOALS	13
1.4	OPEN POLICY ISSUES AND ACTION ITEMS	13
1.5	CONSIDERATIONS FOR FUTURE IMPLEMENTATION	14
2	PURPOSE AND STRUCTURE.....	15
2.1	BOM STRUCTURE	15
3	AUDIENCE	16
4	REQUIREMENTS APPROACH	17
4.1	ARCHITECTURE METHODOLOGY	17
4.2	INFORMATION SOURCES	17
4.3	SUMMARY OF WORKSHOP CONSULTATIONS	18
5	COMPLIANCE WITH STANDARDS AND ARCHITECTURE	22
5.1	STATE OF TENNESSEE STANDARDS.....	22
5.2	FEDERAL STANDARDS	22
5.3	INDUSTRY STANDARDS	23
6	VISION AND GUIDING PRINCIPLES.....	24
6.1	HCFA VISION AND GUIDING PRINCIPLES.....	24
7	SCOPE	31
7.1	ASSUMPTIONS	31
7.2	DEPENDENCIES	31
7.3	CONSTRAINTS.....	32
7.4	REQUIREMENTS RISK MITIGATION	34
8	CURRENT STATE ASSESSMENT	35
8.1	PROGRAM / PROJECT PROFILE	35
8.2	BUSINESS CONTEXT MODEL.....	43
8.3	CURRENT STATE BUSINESS CAPABILITY MODEL	45
8.4	OVERALL BUSINESS ENVIRONMENT & CONTEXT.....	55
9	STAKEHOLDERS, NEEDS, BENEFITS, & OUTCOMES	66
9.1	STAKEHOLDERS, NEEDS, BENEFITS & OUTCOMES	66
10	FUTURE STATE.....	72
10.1	DESIGN APPROACH	72
10.2	DESIGN CONSIDERATIONS & DECISIONS	73
10.3	FUTURE STATE BUSINESS CAPABILITY MODEL.....	77
10.4	STRATEGIC REUSE OF EXISTING IT SYSTEMS AND ASSETS	78
11	SCENARIOS – FUTURE OPERATING MODELS BY ELIGIBILITY PROGRAM	87
11.1	MAGI MEDICAID AND CHIP (VIA FFM).....	88
11.2	MAGI MEDICAID AND CHIP (VIA SELF-SERVICE PORTAL DIRECT TO TENNESSEE) ..	89

11.3	NON-MAGI LTSS	90
11.4	NON-MAGI BCC AND PREGNANCY PRESUMPTIVE ELIGIBILITY	91
11.5	NON-MAGI MEDICALLY NEEDED	92
11.6	EMERGENCY MEDICAL SERVICES	93
11.7	HOSPITAL PRESUMPTIVE ELIGIBILITY	94
11.8	DENIAL CASE – MAGI MEDICAID & CHIP (VIA FFM)	95
11.9	DENIAL CASE – MAGI MEDICAID & CHIP (VIA SELF-SERVICE PORTAL)	96
11.10	REDETERMINATIONS	97
11.11	REDETERMINATION DENIAL	98
11.12	SSI	99
11.13	SSI-RELATED (VIA SSA ASSESSMENT)	100
11.14	MEDICARE SAVINGS PROGRAM AND SSI-RELATED (VIA SELF SERVICE PORTAL) ...	101
11.15	MEDICARE SAVINGS PROGRAM (LIS TRIGGER)	102
11.16	CURRENT FOSTER CARE/STATE CUSTODY/ADOPTION ASSISTANCE.....	103
11.17	FORMER FOSTER CARE.....	104
12	BUSINESS REQUIREMENTS	105
13	BUSINESS PROCESSES	111
13.1	OVERALL ELIGIBILITY OPERATIONS (HIGH LEVEL 0).....	111
13.2	INTAKE BUSINESS PROCESSES (LEVEL 1)	113
13.3	ELIGIBILITY DETERMINATION BUSINESS PROCESSES (LEVEL 1)	122
13.4	ENROLLMENT AND DENIAL/TERMINATION BUSINESS PROCESSES (LEVEL 1).....	133
13.5	CASE MAINTENANCE BUSINESS PROCESSES (LEVEL 1).....	138
13.6	APPEALS BUSINESS PROCESSES (LEVEL 1)	143
14	FUTURE STATE SOLUTION REQUIREMENTS OVERVIEW	153
14.1	USER INTERFACES/POINTS OF ACCESS	157
14.2	PLATFORM.....	161
14.3	ELIGIBILITY SYSTEM MAJOR FEATURE GROUPS	165
14.4	DATA EXCHANGE WITH EXTERNAL STAKEHOLDERS.....	169
14.5	REPORTING AND ANALYSIS TOOLS	173
14.6	REQUIREMENTS TRACEABILITY MATRIX.....	173
APPENDIX A: ACRONYMS USED IN THIS DOCUMENT.....		174
APPENDIX B: HCFA EXECUTIVE VISION AND GUIDANCE		182
APPENDIX C: KERA CAPABILITIES FRAMEWORK		184
C.1	RESOURCE MANAGEMENT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
C.2	PROGRAM & SERVICE MANAGEMENT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
C.3	HHS PROGRAM CORE CAPABILITIES.....	ERROR! BOOKMARK NOT DEFINED.
C.4	DELIVERY CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
C.5	RELATIONSHIP MANAGEMENT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
APPENDIX D: KERA CAPABILITIES DEFINED		185
D.1	PROGRAM AND SERVICE MANAGEMENT	ERROR! BOOKMARK NOT DEFINED.
D.2	BUSINESS PARTNER MANAGEMENT	ERROR! BOOKMARK NOT DEFINED.
D.3	HHS PROGRAM CORE	ERROR! BOOKMARK NOT DEFINED.

D.4	DELIVERY.....	ERROR! BOOKMARK NOT DEFINED.
D.5	RELATIONSHIP MANAGEMENT	ERROR! BOOKMARK NOT DEFINED.
APPENDIX E:	EXTERNAL STAKEHOLDER	186
APPENDIX F:	CURRENT STATE INTERNAL STAKEHOLDERS AND INTERACTION MODELS	197
APPENDIX G:	INVENTORY OF INTERACTIONS	206
G.1	INTERACTION GROUPS.....	206
G.2	INVENTORY OF INTERACTIONS	206
APPENDIX H:	CURRENT INVENTORY OF HCFA RELEVANT APPLICATIONS.....	213
APPENDIX I:	WORKSHOP TOPICS AND PARTICIPANTS.....	233
I.1	WORKSHOP SESSIONS.....	233
I.2	WORKSHOP PARTICIPANTS.....	235
APPENDIX J:	STRUCTURE OF BUSINESS OPERATING MODEL.....	236
J.1	BUSINESS CONTEXT MODEL.....	236
J.2	OPERATING MODELS	236
J.3	BUSINESS PROCESS MODELS	237
J.4	FUTURE STATE ARCHITECTURE.....	237
APPENDIX K:	KERA SOFTWARE SERVICE DEFINITIONS	239
K.1	PRESENTATION SERVICES LAYER	ERROR! BOOKMARK NOT DEFINED.
K.2	BUSINESS SERVICES LAYER	ERROR! BOOKMARK NOT DEFINED.
K.3	APPLICATION PLATFORM SERVICES LAYER	ERROR! BOOKMARK NOT DEFINED.
K.4	INFRASTRUCTURE SERVICES LAYER.....	ERROR! BOOKMARK NOT DEFINED.

LIST OF FIGURES

FIGURE 6-1 HCFA GUIDING PRINCIPLES	26
FIGURE 8-1 HCFA CONTEXT MODEL	46
FIGURE 8-2 HCFA CONSOLIDATED INTERACTIONS – OPERATING MODE	48
FIGURE 8-3 HCFA CURRENT SYSTEMS DATA FLOW	56
FIGURE 8-4 HEAT MAP OF HCFA SOFTWARE SERVICE CAPABILITIES	60
FIGURE 8-5 MATRIX OF BVTQ	62
FIGURE 8-6 ASSESSMENT OF BVTQ	65
FIGURE 10-1 MODEL OF FUTURE STATE BUSINESS CAPABILITIES	80
FIGURE 11-1 MAGI MEDICAID AND CHIP (FFM) FUTURE STATE MODEL	88
FIGURE 11-2 MAGI MEDICAID AND CHIP (VIA SELF-SERVICE PORTAL) FUTURE STATE MODEL	89
FIGURE 11-3 NON-MAGI LTSS FUTURE STATE MODEL	90
FIGURE 11-4 NON-MAGI BREAST AND CERVICAL CANCER FUTURE STATE MODEL	91
FIGURE 11-5 NON-MAGI MEDICALLY NEEDY FUTURE STATE MODEL	92
FIGURE 11-6 EMS FUTURE STATE MODEL	93
FIGURE 11-7 HOSPITAL PRESUMPTIVE ELIGIBILITY FUTURE STATE MODEL	94
FIGURE 11-8 DENIAL FOR MAGI MEDICAID AND CHIP (VIA FFM) FUTURE STATE MODEL	95
FIGURE 11-9 DENIAL FOR MAGI MEDICAID AND CHIP (VIA SELF SERVICE PORTAL)	96
FIGURE 11-10 REDETERMINATIONS FUTURE STATE MODEL	97
FIGURE 11-11 DENIAL CASE: REDETERMINATIONS FUTURE STATE MODEL	98
FIGURE 11-12 SSI FUTURE STATE MODEL	99
FIGURE 11-13 SSI-RELATED FUTURE STATE MODEL	100
FIGURE 11-14 MEDICARE SAVINGS PROGRAM (VIA PORTAL) FUTURE STATE MODEL	101
FIGURE 11-15 MEDICARE SAVINGS PROGRAM (VIA LOW INCOME SUBSIDY REPORT)	102
FIGURE 11-16 CHILD CURRENTLY IN FOSTER CARE FUTURE STATE MODEL	103
FIGURE 11-17 ADULT WITH FORMER FOSTER CARE FUTURE STATE MODEL	104
FIGURE 13-1 ELIGIBILITY OPERATIONS – TOP LEVEL	112
FIGURE 13-2 INTAKE BUSINESS PROCESS (LEVEL 1)	115
FIGURE 13-3 MEMBER PORTAL (OR MOBILE) – ENTER APPLICATION INFORMATION (LEVEL 2)	116
FIGURE 13-4 MAIL/FAX – RECEIVE APPLICATION INFORMATION (LEVEL 2)	117
FIGURE 13-5 WORKER SEARCHES FOR EXISTING APPLICATION/CASE (LEVEL 3)	118
FIGURE 13-6 WORKER INTAKES APPLICATION VIA PHONE (LEVEL 2)	119
FIGURE 13-7 WORKER PORTAL / PARTNER PORTAL (LEVEL 2)	121
FIGURE 13-8 ELIGIBILITY DETERMINATION BUSINESS PROCESS (LEVEL 1)	123
FIGURE 13-9 MEMBER MATCHING FEATURE (LEVEL 2)	124
FIGURE 13-10 MAGI NONFINANCIAL VERIFICATIONS (LEVEL 2)	125
FIGURE 13-11 MAGI FINANCIAL VERIFICATIONS (LEVEL 2)	126
FIGURE 13-12 REQUEST VERIFICATION PROOF FROM APPLICANT (LEVEL 2)	127
FIGURE 13-13 GENERAL NOTICES FLOW (SUBPROCESS FOR ANY TYPE OF NOTICE) (LEVEL 3) ...	129
FIGURE 13-14 PROCESS TO PERFORM ELIGIBILITY DETERMINATION (LEVEL 2)	130
FIGURE 13-15 NON-MAGI NONFINANCIAL VERIFICATIONS (LEVEL 2)	131
FIGURE 13-16 NON-MAGI FINANCIAL VERIFICATION (LEVEL 2)	132

FIGURE 13-17 BUSINESS PROCESS FOR ENROLLMENT OR DENIAL / TERMINATION (LEVEL 1)	133
FIGURE 13-18 ENROLLMENT PROCESS (LEVEL 2)	134
FIGURE 13-19 PROCESS TO TRANSFER INFORMATION TO EXTERNAL SOURCES (LEVEL 3).....	135
FIGURE 13-20 PROCESS TO TRANSFER ELIGIBILITY RECORD TO MMIS (LEVEL 3).....	136
FIGURE 13-21 PROCESS FOR DENIAL OR TERMINATION (LEVEL 2)	137
FIGURE 13-22 CASE MAINTENANCE BUSINESS PROCESSES (LEVEL 1).....	139
FIGURE 13-23 POSTELIGIBILITY VERIFICATION PROCESSES (LEVEL 2)	140
FIGURE 13-24 REDETERMINATION PROCESS (LEVEL 2)	141
FIGURE 13-25 AGE-OUT/POSTPARTUM/GROUPING ASSESSMENT PROCESS (LEVEL 2)	142
FIGURE 13-26 APPEALS BUSINESS PROCESS (LEVEL 1).....	143
FIGURE 13-27 APPEALS REVIEW PROCESS (LEVEL 1)	144
FIGURE 13-28 APPEALS INTAKE PROCESS (LEVEL 3).....	145
FIGURE 13-29 QUALITY IMPROVEMENT AND COMPLIANCE REVIEW PROCESS (LEVEL 3)	146
FIGURE 13-30 ART / AIR (LEVEL 3).....	147
FIGURE 13-31 HEARING PROCESS (LEVEL 2)	148
FIGURE 13-32 HEARING PREPARATION PROCESS (LEVEL 3)	149
FIGURE 13-33 PETITION PROCESS (LEVEL 2)	150
FIGURE 13-34 PROCESS FOR IMPLEMENTING ORDER/RESOLUTION OUTCOME (LEVEL 2)	151
FIGURE 13-35 PROCESSING REQUEST FOR CONTINUATION OF BENEFITS (LEVEL 2)	152
 FIGURE 14-1 MODEL OF FUTURE STATE TECHNICAL CAPABILITIES.....	 154
FIGURE 14-2 CONCEPTUAL ARCHITECTURE OF HCFA NEW ELIGIBILITY SYSTEM	155
FIGURE 14-3 TEDS AND IDAM PROJECT TIMELINE ALIGNMENT	161
FIGURE 14-4 TIERED INTEGRATION ARCHITECTURE	163
FIGURE 14-5 HIE PROJECT TIMELINE AND MPI ROLLOUT DATE	165
FIGURE 14-6 TNHC INFORMATION SHARING OF APPLICANT/MEMBER DOCUMENTS	168
 FIGURE B-1 STRATEGIC GOALS	 182
 FIGURE C-1 FRAMEWORK	 ERROR! BOOKMARK NOT DEFINED.
FIGURE C-2 OPERATING MODEL – EOG	ERROR! BOOKMARK NOT DEFINED.
 FIGURE F-1 EOG OPERATING MODEL	 198
FIGURE F-2 TENNCARE ELIGIBILITY POLICY OPERATING MODEL.....	199
FIGURE F-3 SERVICE CENTER CONTRACTS OPERATING MODEL.....	200
FIGURE F-4 PERFORMANCE MANAGEMENT OPERATING MODEL	201
FIGURE F-5 APPEALS OPERATING MODEL	202
FIGURE F-6 TENNESSEE HEALTH CONNECTION’S OPERATING MODEL	203
FIGURE F-7 TENNCARE INFORMATION SYSTEMS OPERATING MODEL.....	204
FIGURE F-8 INTERACTIONS – EXTERNAL TO MEMBER SERVICES & INTERNAL TO HCFA.....	205

LIST OF TABLES

TABLE 4-1 SOURCES OF INFORMATION FOR BOM	17
TABLE 6-1 GUIDING PRINCIPLES, CAPABILITIES AND BENEFITS	29
TABLE 8-1 HCFA SYSTEMS REPLACEMENT OR MODIFICATION RECOMMENDATIONS	57
TABLE 8-2 HEAT MAP OF SOFTWARE SERVICE CAPABILITIES	59
TABLE 8-3 CRITERIA FOR BUSINESS VALUE SYSTEM ASSESSMENT	62
TABLE 8-4 CRITERIA FOR TECHNICAL QUALITY SYSTEM ASSESSMENT	63
TABLE 10-1 APPEALS UNIT-SPECIFIC BUSINESS CAPABILITIES.....	79
TABLE 10-2 MoSCoW PRIORITIZATION CRITERIA.....	81
TABLE 10-3 INTAKE CHANNELS FOR FUTURE STATE	82
TABLE 10-4 MoSCoW PRIORITIZATION OF FUTURE STATE INTAKE CHANNELS	85
TABLE 12-1 BUSINESS REQUIREMENTS AND CORE CAPABILITIES SUMMARY	105
TABLE 14-1 MoSCoW ANALYSIS OF PARTNER PORTAL	159
TABLE A-1 ACRONYMS DEFINED.....	174
TABLE C-1 KERA IT MANAGEMENT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE C-2 KERA PROGRAM MANAGEMENT & OPERATIONS CAPABILITIES ..	ERROR! BOOKMARK NOT DEFINED.
TABLE C-3 KERA BUSINESS PARTNER MANAGEMENT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE C-4 KERA MEDICAID CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE C-5 KERA HHS CLIENT MANAGEMENT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE C-6 KERA STAKEHOLDER COMMUNICATIONS CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE C-7 KERA STAKEHOLDER SUPPORT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE D-1 PROGRAM MANAGEMENT AND OPERATIONS CAPABILITIES ..	ERROR! BOOKMARK NOT DEFINED.
TABLE D-2 SERVICE OPERATIONS CAPABILITIES.....	ERROR! BOOKMARK NOT DEFINED.
TABLE D-3 HUMAN SERVICE DESIGN CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE D-4 BUSINESS PARTNER INFORMATION SHARING CAPABILITIES..	ERROR! BOOKMARK NOT DEFINED.
TABLE D-5 MEDICAID HEALTH COVERAGE CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE D-6 HHS CLIENT ELIGIBILITY AND ENROLLMENT CAPABILITIES ..	ERROR! BOOKMARK NOT DEFINED.
TABLE D-7 CASE INFORMATION MANAGEMENT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE D-8 HHS CLIENT REFERRAL CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE D-9 HHS CLIENT COMMUNICATION AND OUTREACH CAPABILITIES ...	ERROR! BOOKMARK NOT DEFINED.

TABLE D-10 HHS CLIENT INFORMATION CAPABILITIES.....	ERROR! BOOKMARK NOT DEFINED.
TABLE D-11 GRIEVANCE AND APPEALS CAPABILITIES.....	ERROR! BOOKMARK NOT DEFINED.
TABLE D-12 STAKEHOLDER CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE D-13 TRANSACTION SUPPORT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE D-14 TRANSACTION SUPPORT CAPABILITIES	ERROR! BOOKMARK NOT DEFINED.
TABLE E-1 STAKEHOLDER COMMUNICATION CAPABILITIES	186
TABLE E-2 LIST OF CLIENT EXTERNAL STAKEHOLDERS.....	187
TABLE E-3 LIST OF BUSINESS PARTNER EXTERNAL STAKEHOLDERS	190
TABLE E-4 LIST OF SUPPLIER EXTERNAL STAKEHOLDERS	193
TABLE E-5 LIST OF GOVERNING ORGANIZATION EXTERNAL STAKEHOLDERS.....	195
TABLE G-1 LIST OF INTERNAL STAKEHOLDERS FOR INTERACTION GROUPING	206
TABLE G-2 INVENTORY OF INTERACTIONS – INTERNAL STAKEHOLDER COMMUNICATION CAPABILITIES.....	206
TABLE H-1 INVENTORY OF APPLICATIONS – DESCRIPTION.....	213
TABLE H-2 INVENTORY OF APPLICATIONS – BUSINESS ATTRIBUTES.....	217
TABLE H-3 INVENTORY OF APPLICATIONS – OPERATING ATTRIBUTES.....	220
TABLE H-4 INVENTORY OF APPLICATIONS – COTS ATTRIBUTES	224
TABLE H-5 INVENTORY OF APPLICATIONS – LEVEL OF EFFORT REQUIRED TO MAINTAIN	228
TABLE I-1 COLLABORATION WORKSHOP SESSIONS	233
TABLE I-2 WORKSHOP PARTICIPANTS	ERROR! BOOKMARK NOT DEFINED.

REVISION HISTORY

REVISION	DESCRIPTION OF CHANGE	AUTHOR	EFFECTIVE DATE
1	Current State Document – including feedback comments received from State of TN.	Section intentionally left blank	Feedback Received 11/30/2015
1	Future State Document – including feedback comments received from State of TN	Section intentionally left blank	Feedback Received 12/14/2015
0.1 through 0.12	Consolidation of Current and Future State, incorporated feedback received on Current State (sent to HCFA 11/4/2015) and Future State reports (sent to HCFA on 11/19/2015). Internal reviews.	Section intentionally left blank	2/22/2016
0.13	Leadership review.	Section intentionally left blank	3/4/2016
1	Final review.	Section intentionally left blank	3/7/2016
2	Revert change from EMP back to TEDS within document and across all embedded diagrams.	Section intentionally left blank	3/7/2016
2.1	Added Appendix K – KERA Software Service Capability definitions	Section intentionally left blank	3/10/2016
2.2	Removed tracked changes and comments.	Section intentionally left blank	3/22/2016
2.3	Minor edit to concluding paragraph of Section 8.4.6.	Section intentionally left blank	3/23/2016
2.4	Updates to all sections per Feedback Comments Log.	Section intentionally left blank	3/23/2016
3.0	Final formatting – using Chicago Style Guide basis. Review of pagination.	Section intentionally left blank	3/24/2016

1 EXECUTIVE SUMMARY

1.1 PROJECT BACKGROUND

The State of Tennessee Department of Finance and Administration, Division of Health Care Finance and Administration (HCFA), hereinafter referred to as the “State” or “HCFA,” operates the federal Medicaid program in Tennessee known as “TennCare” through its Bureau of TennCare (Bureau), pursuant to Waivers granted by the federal Centers for Medicare and Medicaid Services (CMS). HCFA also operates the federal Children’s Health Insurance Program (CHIP) in Tennessee known as “CoverKids” (collectively referred to herein as “CoverKids” or “CHIP”). Eligibility determination and related responsibilities for TennCare and CoverKids are handled through a combination of State staff and HCFA contractors, as are operation and maintenance of the State’s Medicaid Management Information System (MMIS). In addition, HCFA oversees other health care-related functions and services, including the Tennessee Office of eHealth Initiatives (OeHI) and the Strategic Planning and Innovation Group.

Pursuant to federal law and CMS’ requirements, HCFA is undergoing a Medicaid Modernization Program (MMP or Program) which includes both:

- Information technology (IT) systems relating to TennCare and CoverKids (including the MMIS), and
- The TennCare and CoverKids eligibility determination processes.

The MMP must incorporate and comply with all applicable federal and State laws, rules, regulations, subregulatory guidance, executive orders, CMS TennCare Waivers, and all current, modified or future Court decrees, orders or judgments applicable to the TennCare and CHIP programs (collectively referred to herein as the Applicable State and Federal Requirements). These include, but are not limited to, the Patient Protection and Affordable Care Act (PPACA), Health Insurance Portability and Accountability Act (HIPAA), CMS Medicaid Information Technology Architecture (MITA 3.0), and CMS Seven Conditions and Standards.

The Tennessee Eligibility Determination System (TEDS) project represents the State’s highest priority within the MMP project portfolio. Major features of TEDS include a rules-based decision engine, enabling eligibility determinations that are fully compliant with the PPACA, CMS requirements and all applicable State and Federal regulations. In order to support making real-time eligibility verifications and determinations for TennCare and CHIP, the new system shall interface with the Federally Facilitated Marketplace (FFM) Federal Data Services Hub (FDSH).

1.2 CURRENT STATE CHALLENGES RESOLVED IN FUTURE STATE

The State has several challenges that can become key drivers for transformation and high-priority focus areas for improvement in the future state for eligibility determinations. The key challenges

are summarized below:

- Limited document management capabilities results in abundance of paper-based documentation.
- Lack of system integration and system usability (use of Microsoft Access databases) results in increased work time and effort regarding data housekeeping (non-value-added tasks), instead of member service (value-added casework). Because of the manual extraction, transformation, and load processes used to transfer data between stand-alone systems, every data transfer results in issues related to de-duplication of records. Transfers require excessing pre- and post-processing.
- Manual methods are currently used to assess the financial and nonfinancial information needed to determine eligibility. Modified Adjusted Gross Income (MAGI) method eligibility categories that are currently performed by the Federally Facilitated Marketplace (FFM) can be supported in the future state through in-house managed automation. These categories are also the programs that have the highest application volumes.¹
- Currently, applicant verifications using electronic databases are done via manual lookups. In the future state, critical verifications will be done within the application process, in near-real time, using the FDSH, in accordance with HCFA's Verification Plan filed with CMS. These automated verifications include identity, citizenship/immigration status, and income verifications, as well as verification of Medicare Part A eligibility.
- Posteligibility verifications are currently only semi-automated. In the future state, posteligibility verifications will include automated periodic matching with external electronic databases. Matches will trigger a request for additional information from the member. If the member does not timely respond, then the automated system can determine the member's eligibility based upon the information from the electronic data source. In like manner, the annual redetermination process will verify member income and appropriate nonfinancial information to verify whether or not the member's current circumstances continue to maintain eligibility. The future state will fully automate these applicant and member posteligibility verifications.
- Numerous issues exist that are related to data integrity of applications received from the FFM, including significant task time to eliminate duplicate data. Legacy systems are unable to accept multiple values (matrix of values) for the same data element, among other data transfer issues.

¹ Non-MAGI, Institutional and HCBS, and the Medicare Savings Programs do not use the MAGI method. Typically, the quantity of applications received for these programs is less than the quantity received for the MAGI programs. However, the same application submitted for a MAGI determination may also be used to trigger the need for additional information and consideration under the other categories. The Future State will enable collecting all information for all programs within a single application. The paper application will be supplemented with program-specific appendices, and the on-line application will have dynamic questions, which collect additional information based upon the applicant's responses to general questions.

The FFM is also evolving with regard to Account Transfer data interface structure and mechanisms. The future state will have a robust TEDS interface that is capable of loading Extensible Markup Language (XML) data from the FFM without manual intervention.

- The current presumptive eligibility processes result in having to handle the same case/applicant multiple times, as the same person's Medicaid/CHIP application enters HCFA from both provider (presumptive) and FFM channels (full application). Compounding the problem, the account transfers from the FFM have data integrity issues, including duplicates of applications and difficulty in recognizing a "change of circumstances" application that was submitted on the same day as the original application. In the future state, temporary eligibility will be determined from the single application. Eligibility beyond the temporary eligibility cut-off date will be processed as a change of circumstances determination (by applicant submitting updated, complete information) or as a posteligibility automatic termination triggered by the calendar date (when applicant fails to provide information within the allowed time limit.)
- Numerous issues exist with caseworker review of paper applications. The future state will overcome intake channel issues primarily by enabling online applications data entry, initially via a service center. Eligibility will be determined via automated processes. Where caseworker review is necessary, the system will support a managed workflow, instead of reviewing paper application documents.
- The future state will overcome the current challenges inherent in the aging eligibility system, Automated Client Certification and Eligibility Network for Tennessee (ACCENT). The ACCENT caseload system² currently supports multiple social welfare programs. In the future state the eligibility for health care programs will not be in ACCENT, but will reside in the new TEDS. Current recent capability additions are one-off "islands" that do not support modular integrated eligibility. With appropriately meshed eligibility, social welfare programs will operate independently, while still enabling maximized information sharing.
- The Appeal unit currently has no automated method to link appeals to the eligibility case management system. The future state will overcome appeals issues primarily by enabling

² For example, ACCENT case management system is used for determining eligibility for both the SNAP/TANF program and the Medicaid program. For September 2015, 23% of the individual applicants being assisted to resolve an inconsistency in their application information (i.e., not reasonably compatible with electronic sources) also had existing SNAP/TANF cases. However, the ACCENT case management system cannot accommodate the two different sets of rules used to determine an individual's total monthly income for the two different social welfare programs. Although the rules for Financially Responsible Relatives (used for SNAP/TANF) are different from the Modified Adjusted Gross Income rules, typically in most situations the end eligibility outcome is the same. However, use of the ACCENT system requires manual eligibility specialist task work to document the MAGI calculation. TEDS will enable automation of Medicaid determinations, entirely independent from the SNAP/TANF determinations.

information sharing with the appeals unit. Appeals unit workers will have a single source of “most current” application information (such as “applicant mailing address”) instead of having to manually check multiple sources. Appeals unit workers will be able to status whether or not a member has requested an appeals hearing or requested a continuation of benefits while the appeals process is in-progress.

- Security and privacy service improvements are in-progress, but the macro-level enterprise does not support robust, scalable growth that can protect against escalating threats.
- Although the Supplemental Nutrition Assistance Program (SNAP) and Temporary Assistance for Needy Families (TANF) programs are administered by the Department of Human Services (DHS) and will not be integrated into the Tennessee Eligibility Determination System (TEDS), a modular design approach will enable appropriate information sharing for holistic family casework, as well as supporting potential future integrated eligibility platform.
- The lack of dynamic dashboards, business intelligence (BI) and data analytics restrict management and supervisory operations to making decisions based upon static reports.
- From an end-to-end perspective, the high number of manual links creates a high risk of potential interruption or delay.
- HCFA uses subcontract resources to perform operations. There is no overall unifying framework for vendor management within the MMP.

1.3 SUMMARY OF TEDS PROJECT OVERALL GOALS

The goal of the project is to modernize all aspects of Medicaid and CHIP eligibility operations, enabling HCFA to automate all Medicaid and CHIP eligibility determinations and streamline related appeals functions. This includes providing automated functionality for Tennesseans to apply for Medicaid directly with HCFA, in addition to the option of filing an application through the FFM. These efforts are intended to reduce the need for workers to process eligibility manually by automating processes that are currently handled manually with minimal systems support.

The procurement and implementation of a single, streamlined eligibility determination system for Medicaid and CHIP, along with enhancements to the State’s eligibility determination and eligibility appeals processes, will allow Tennessee to provide its residents with a seamless customer experience providing real-time or near real-time determination of eligibility. At the forefront of this effort is a broader channel management strategy that emphasizes efficiently capturing eligibility data electronically, regardless of how applicants choose to provide it, while promoting self-service and reducing transaction costs.

1.4 OPEN POLICY ISSUES AND ACTION ITEMS

There are no open policy issues or action items that are specific to the delivery of the business operating model (BOM).

- The ongoing routine updates to existing HCFA eligibility policies will not significantly affect business work processes; they will be realized through the detail rules design.

- The new Hospital Presumptive Eligibility Policy/Program has not been formally released, but was included in the development of business work processes.
- The Tennessee Verification Plan document is in the process of being formally updated. It will be consistent with the verification requirements included within this document.

The TEDS project is in process to source and select solution providers.

1.5 CONSIDERATIONS FOR FUTURE IMPLEMENTATION

In order to achieve the documented TEDS Vision and Guiding Principles, HCFA plans to undertake a lower-risk and incremental approach to modernization that allows for the achievement of “Quick Wins” that provide early value and incremental service delivery transformation while building systematically toward a larger, multiyear modernization effort. The high-level Road Map includes four releases and four categories of projects (Project Groups) that are described fully in the separate Roadmap Document.

During the development phase of the project, the Roadmap document will be updated and maintained, identifying the project implementation progress across development and production releases. It is anticipated that with each development release, a document of the subset of overall business requirements relevant to the release will be issued by the System Integrator (SI), in addition to the solution specifications relevant for each release (identifying the specific functional and nonfunctional requirements). Each release will reinforce full traceability of implemented solution requirements trace to business requirements.

2 PURPOSE AND STRUCTURE

The purpose of the BOM document is to:

- Assess and model the current state of eligibility-related business operations
- Using the enterprise-level vision, model a future state which resolves current state challenges and achieves enterprise goals
- Analyze the gap between current and future state business processes,
- Specify the high-level conceptual architecture for the future state of HCFA's Member Services' Medicaid and CHIP Eligibility and Enrollment processes and technology, and
- Fulfill the MMP Technical Advisory Services (TAS) project A.60 requirements for design of the BOM.

This document defines the scope of the logical and physical solution effort, and is used by the business to build consensus with internal stakeholders on requirements, define business processes, and establish the integration of the solution design approach into the business. The BOM also identifies the conceptual systems architecture that will be required to enable the solution, in a technology independent manner.

The approach used to derive business requirements is based on a model driven requirements analysis. The modeling approach is used to ensure that all business requirements are identified. The BOM identifies the high-level business requirements that the vendor's solutions must address in order to meet the goals of the TEDS. It presents a logical sequence of architecture models, with the initial models describing requirements at a higher level and subsequent models providing a deeper level of detail.

2.1 BOM STRUCTURE

The State of Tennessee is employing a program strategy that develops reusable HCFA architecture artifacts during the lifecycle of MMP projects. Therefore, the structure of this BOM Design has been tailored to reflect the business architecture artifacts that will be captured within the execution of an MMP project. [1.1](#) provides an introduction to the models developed for the enterprise-level BOM Design.

3 AUDIENCE

This document is intended to be used by:

- Project stakeholders and business users of the solution, to ensure their needs have been captured accurately
- Project staff to help estimate solution schedule, effort, and resource requirements
- Operations and maintenance organizations to understand what the solution is supposed to do and how it will integrate into the business
- SIs, who are seeking to understand the future state goals for eligibility operations.

4 REQUIREMENTS APPROACH

The requirements approach is to design the transformation of the business, from top-level vision through business operations design and technical needs, in a technology independent manner.

4.1 ARCHITECTURE METHODOLOGY

Requirements were elicited and modeled to be technology independent, focused on business needs. To promote adequate requirements coverage, enterprise-level operations were modeled, capturing relationships between operating groups. Each process was then decomposed into successive levels of detail.

For HCFA, the more detailed logical target architectures will be defined by the SI, based on the SI's proposed solution. By tracing the business requirements to business goals and objectives, the impact of the implemented solution can be measured to ensure that the program business goals have been achieved.

Requirements are managed through the lifecycle of implementation and verification through the Requirements Management Plan. This assures that changes to requirements are evaluated in accordance with business goals, considering impact to schedule, cost and business outcomes.

4.2 INFORMATION SOURCES

[Table 4-1](#) summarizes the unique information sources offered by Tennessee stakeholders to establish the most comprehensive view of the current state environment and the future state.

Table 4-1 Sources of Information for BOM

#	INFORMATION SOURCE	CONTENT OVERVIEW
1	KERA, which leverages TAS consultant's experience in State health and human service programs	KERA is a reference business architecture which identifies the operations, interactions, relationships and capabilities that are industry standard for a Medicaid enterprise.
2	MMIS Planning Advance Planning Document	HCFA's Mission and Vision were used to develop TEDS guiding principles.
3	TennCare Demonstration Evaluation Design, draft of 6/29/2015	TennCare's Strategic Goals were used to develop TEDS guiding principles.
4	MMP Overview	The Program's Strategic Goals were used to develop TEDS guiding principles.
5	HCFA – Bureau of TennCare 2015–2017 Information Systems Plan	HCFA's Mission for Information Systems and Mission for Eligibility and Enrollment Operations were used to develop TEDS guiding principles.
6	State of Tennessee HCFA policy documentation	HCFA's policy documentation identifies the categories of Medicaid and CHIP eligibility, and

#	INFORMATION SOURCE	CONTENT OVERVIEW
		prescribes the rules for determining eligibility for each category.
7	State of Tennessee HCFA Organization	HCFA's organization identifies the business unit teams.
8	State of Tennessee Business Process documentation	The process documentation itemizes the many manual subprocesses and steps necessary in the current process to transfer data throughout the workflow.
9	State of Tennessee Interface and Systems Architecture documentation	These documents snapshot the data flows between systems, for a subset of eligibility-related data.
10	HCFA Relevant Systems Inventory	Detailed description of each system, including 32 key attributes such as number of users and transaction volume. (G.1)

4.3 SUMMARY OF WORKSHOP CONSULTATIONS

The State engaged TAS consultants to facilitate the gap assessment of current state and future state business processes for determining Medicaid/CHIP eligibility and enrollment, including the appeals processes. In support of this effort, KERA was leveraged as the framework for eliciting requirements and modeling the business enterprise.

First, the project business architecture team documented HCFA's current state by conducting workshops and leveraging the KERA Context, Operating, Business Capability, and Technical Capability Models. Next, the project business architecture team used these models to define the Future State. Business processes were then defined for the future state.

Stage 1 – Establish guiding principles and goals for service delivery

- This step required documenting the key guiding principles and goals for Medicaid and CHIP Eligibility processes and delivery via executive visioning workshops. These guiding principles are integral to the development of the future state work sessions and recommendations as they influence the functionality and align the projects that will compose the future state Road Map. Tennessee Member Services leadership reviewed and approved the guiding principles that were leveraged for all the future state workshops. To perform this task, the technical advisory consultants facilitated two work sessions, one session including a larger group of attendees to establish the guiding principles, and a second session that included a review of the guiding principles by executive leadership.

Stage 2 – Identify the various external stakeholders (including service delivery partners) and interactions

- In this step, the technical advisory consultants leveraged the KERA repository to facilitate the State team by providing reference implementation of typical external stakeholders and interactions that are generic for similar programs. The Context Model was used for this scope and is described as a black-box view that depicts the Governing organizations, suppliers, partners, and applicants/members that interact with the enterprise along with their associated interactions. To perform this task, the technical advisory consultants facilitated two work sessions, reviewed the baseline external stakeholders and interactions with State resources, and updated documentation per session feedback.

Stage 3 – Identify the various internal stakeholders/information users that interact within the State to perform service delivery and identify the current business service catalog

- In this step, the technical advisory consultants leveraged the KERA repository to facilitate a dialogue with the State team by providing reference implementation of typical internal stakeholder interactions that are industry standard for Medicaid. The Operating Model was used for this scope and is described as an open-box view that depicts the same information as the Context model, but includes the services, internal stakeholders, and interactions. To perform this task, the technical advisory consultants facilitated two work sessions, reviewed the baseline internal stakeholders and interactions with State resources, and updated documentation per session feedback.

Stage 4 – Identify the various business and technical capabilities that are currently present in the State enterprise for programs in scope

- In this step, the technical advisory consultants leveraged the KERA capability models to facilitate a dialogue with the State team by providing reference implementation of typical business and technical capabilities that are required for a Medicaid enterprise. The capability models leverage MITA, Enterprise Reference Architecture (ERA), and National Human Services Interoperability Architecture (NHSIA) standards and have been enhanced to include additional capabilities based on consultant experience with several states. To perform this task, the technical advisory consultants facilitated two work sessions and reviewed the baseline set of business and technical capabilities with State resources, updating documentation per verbal participant feedback from the sessions. In addition, the technical advisory consultants reviewed available system and business process documentation to further refine models.

Stage 5 – Identify the options for Intake Channels and Interactions

- In this stage, the TAS consultants used industry standards to facilitate a dialogue with the HCFA team regarding the modernization options available regarding application

and appeals intake channels. After evaluating the benefits of the intake channel options, a variant of “Must have,” “Should have,” “Could have,” “Would like but won’t implement” (MoSCoW)³ analysis was performed to rank each of the intake channels for each program type ([Table 10-2](#)).

Stage 6 – Review the current Appeals process and the future state capabilities needed for Appeals

- In this stage, the TAS consultants reviewed the current system and interacted with key stakeholders to identify the challenges with regard to the appeals process. The assessment used the major scenario types of appeals, detailing the process flow in the current state. In addition, the TAS consultants leveraged the KERA model to provide business process groupings and capabilities relevant to industry standards for the future state.

Stage 7 – Future state Eligibility Determination scenario flows by eligibility program

- In this stage, the project team used the eligibility categories and HCFA policies to create high-level scenario flows. These scenario flows depict the business sequence of capabilities in performing eligibility determinations for each of the different program types, such as Breast or Cervical Cancer (BCC) and programs that use the MAGI methodology for eligibility determination ([Section 9](#)). The existing challenges were reviewed, with assessment of how the future state mitigates these challenges.

Stage 8 – Assessment of IT systems business value and technical quality

- In this stage, the project team leveraged KERA to identify business and technical attributes for each existing Tennessee IT system. The attributes and an inventory of Tennessee systems were used to create a survey, with State stakeholders providing independent assessment results, based upon the KERA defined criteria. The project team then consolidated all the survey results and added perspective gained through discussions with IS, calculating rankings for each system, which were used to group systems based on the direction to maintain/consolidate or retire/replace.

Stage 9 – Technical systems architecture

- In this stage, the TAS consultants leveraged the industry standard architecture of layering separate presentation, calculating/processing service and database storage capabilities applied both the guiding principles and the in-scope business capabilities

³ MoSCoW refers to the business analysis prioritization technique used to reach a common understanding with stakeholders on the importance they place on the delivery of each requirement. The term MoSCoW refers to four prioritization categories: ‘Must have’, ‘Should have’, ‘Could have’, and ‘Would like but won’t implement’. The interstitial ‘o’ is typically to make the acronym pronounceable as a word. For this reason, the ‘o’ is lower case.

to identify the key systems that would be required to provide the level of automation identified as a priority. These system services were described using KERA's standardized Software Services Model to select the required presentation, business services, application services, and infrastructure layers which most aligned to the business needs.

Stage 10 – Roadmap for implementation strategies

- In this stage, the TAS consultants guided discussion to evaluate the cost/risk tradeoffs of three implementation approaches: (1) Scenario-based, which implements projects focused on delivering end-to-end value for a target eligibility program type, (2) Capability-based, which implements a single functional improvement across all programs, and (3) Medicaid-wide, which implements multiple functionalities simultaneously across the entire system. Leveraging the KERA capabilities, the TAS consultants guided participant discussion to assign an approach for each of the capabilities, and to group capabilities into project types. The roadmap was then created by defining projects, identifying first the primary projects that will contribute directly to HCFA Eligibility operations, followed by projects that reduce operating costs, improve operations timeliness, and improve capability for management oversight with real-time data and flexible “on-demand” query reporting.

Stage 11 – Business Process Flows

- In this stage, the TAS consultants guided discussion to identify the major activities. Each process identified a triggering event (input, including calendar timers), supplier sources of information, review processes, calculation processes, and process outputs/branches to subsequent processes. Process outcome communication, including messages and notices, is identified.

Stage 12 – Requirements Analysis

- In this stage, the TAS consultants guided discussion to decompose business processes, identifying the sequence of activities to complete a business process, including the business roles responsible for performing the process, and the inputs, outputs, and outcome to successive processes.
- Each activity was analyzed to generate the functional and nonfunctional requirements that are necessary to achieve the business requirements.

The Business Requirements Document is an output of HCFA collaborative workshops. [APPENDIX I](#): details the workshop topics and participant rosters.

5 COMPLIANCE WITH STANDARDS AND ARCHITECTURE

The structure of this BOM design complies with MMP architecture design standards, and was generated in accordance with the Project and Systems Development Lifecycle (SDLC) Management Plan, documented in the Proposer's Library as A.25.

5.1 STATE OF TENNESSEE STANDARDS

To maximize project efficiency in reuse of architecture, the State of Tennessee has adopted the following standards, which are applicable to all projects in the MMP. These references were used to develop the BOM design.

- EA-BOM Plan (Document A.17 in the Proposer's Library)
- Tennessee Business Solutions Methodology, as documented at: internet site at: <http://www.tn.gov/finance/tbsm/tbsm.shtml>.
- Tennessee MAGI-based Eligibility Verification Plan (FINAL version)
- HCFA Eligibility Policy (consolidated) – version as of February 3, 2016

The TEDS solution functionality is also required to be compliant to other State of Tennessee standards relevant to security and information privacy. These standards are specifically listed in the Request for Proposal.

5.2 FEDERAL STANDARDS

The business architecture is aligned to:

- PPACA,
- HIPAA,
- MITA 3.0, and
- CMS Seven Conditions and Standards.

HCFA's vision is to achieve compliance to the federal security and privacy standards adopted by the U.S. Department of Health and Human Services for Exchanges, the level 2.00 Minimum Acceptable Risk Standards for Exchanges – CMS' Exchange Reference Architecture Supplement, (MARS-E). In addition, TEDS is envisioned to utilize federal tax information (FTI) for income verification, and thus will need to be compliant with IRS regulations and policies regarding FTI.

The TEDS solution functionality is also required to be compliant to numerous other federal standards relevant to accessibility, security, and information privacy. These standards are specifically listed in the Request for Proposal.

5.3 INDUSTRY STANDARDS

The business architecture is aligned to:

- The Open Group Architecture Framework (TOGAF) 9.0
- The SDLC includes the following industry standard phases: Planning, Requirements, Design, Development, Unit Testing, System Testing, Integration Testing, Performance Testing, and User Acceptance Testing (UAT).

6 VISION AND GUIDING PRINCIPLES

While business requirements answer the question of “what,” the vision and guiding principles are the reasons (i.e., the “why”) which support the requirements. These principles are a critical bridge from the current state. Guiding principles assure alignment, so that issues recognized from the future state assessment are balanced (no organization team is over- or under-represented) and congruent to executive strategic goals.

During the “how” phase of designing, and during the development stage of implementation, it will also become necessary to prioritize, manage and allocate requirements. An understanding of the vision and guiding principles provides the objective basis for performing this aspect of requirements management.

6.1 HCFA VISION AND GUIDING PRINCIPLES

Guiding Principles bridge analysis from the current state to the future state, aligning improvement goals to the HCFA Mission and Vision.

The State identified guiding principles by considering examples for:

- **Priorities:** Does HCFA have any strategic priorities that it uses for prioritization?
- **Themes:** Are there any themes that describe the goals of Member Services?
- **Key Metrics:** What key metrics are or could be used by HCFA and Member Services to measure performance?
- **Qualitative Benefits:** What changes will provide improved service to applicants/members? Improved caseworker morale? Improved program management?
- **Quantitative Benefits:** Participants identified existing challenges that waste resources and time.

6.1.1 HCFA Mission

The mission of HCFA is to maintain an exemplary system of high-quality healthcare for eligible Tennesseans within a sustainable and predictable budget. (Source: MMIS Planning Advance Planning Document).

6.1.2 HCFA Vision

HCFA's vision is setting the standard in health care management by delivering high-quality, cost-effective care that results in improved health and quality of life for eligible Tennesseans. (Source: MMIS Planning Advance Planning Document).

6.1.3 HCFA Core Values

Commitment: Ensure that Tennessee taxpayers receive value for their tax dollars.

Agility: Be nimble when situations require change.

Respect: Treat everyone as we would like to be treated.

Integrity: Be truthful and accurate.

New approaches: Identify innovative solutions.

Great customer service: Exceed expectations.

6.1.4 HCFA Guiding Principles

The technical advisory consultants facilitated workshops with the State's executive leadership to document a set of guiding principles that harmonize the unique strategic goals of both HCFA Member Services and other MMP projects and reflect their vision for the future of the State's modernization efforts.

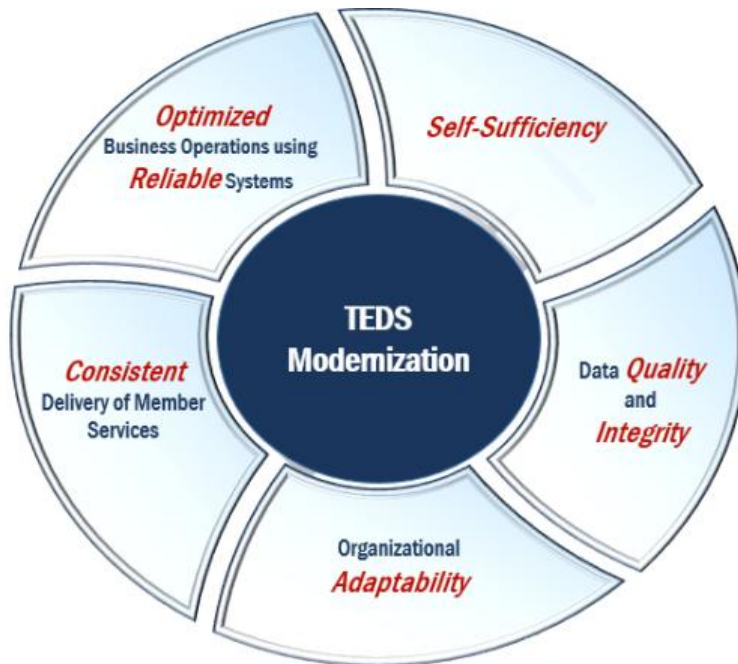
Key "Future State Guiding Principles" developed by the State are:

- Consistent delivery of member services
- Optimized business operations using reliable systems
- Self-sufficiency
- Organizational adaptability
- Data quality and integrity

[Figure 6-1](#) models the synergy of the guiding principles, highlighting the key attributes in red font.

Conceived during the Current State assessment workshops, the guiding principles were further refined and elaborated during the Future State analysis workshops. Adopted as guiding principles, these major themes were used to align all initiatives regarding Future State, assuring a cohesive, systematic approach to synchronize end-to-end realization of improvements.

Figure 6-1 HCFA Guiding Principles



Workshop participants elaborated the five (5) guiding principles with specific strategies that are being used to prioritize decisions for the future state of eligibility operations:

1. Consistent delivery of member services and implementation of member self-service channel:

- Expand and improve eligibility intake channels via service contact center⁴ and online portal to increase applicant and member satisfaction;
- Provide real-time or near real-time eligibility determinations, without agency worker intervention, and improve the accuracy of eligibility determinations;
- Reduce unnecessary manual intervention by HCFA workers by providing functionality for members to access authorized eligibility applications, submit documentation and update personal information;
- Provide information to applicants and members in a manner of their choosing (e.g., paper, electronic);
- Utilize a single contact center for all eligibility-related services; and
- Provide HCFA member services (e.g., service center staff) with online access to information needed to respond to member inquiries in a timely fashion.

⁴ Service center will include call center capabilities to respond to public.

2. Optimized business operations using reliable systems:

- Provide a high level of automation and systems adaptability throughout the eligibility process;
- Minimize complexity of user interfaces to perform systems functions;
- Implement a content management system (including document management) in compliance with state and federal regulations and statutes;
- Reduce the cost of future technology enhancements by implementing modular components;
- Define and institutionalize business processes, operational changes and eligibility rules throughout the agency;
- Implement and integrate an automated business rules engine to enable updates with less development cost when regulations, statutes, or eligibility standards change;
- Establish an automated capability component to generate notices to applicants, members, stakeholders and business partners; and
- Consolidate data currently housed in separate systems into a single system, reducing the need for HCFA staff and contracted vendors to have to access multiple systems / databases in order to complete a task.

3. Self-sufficiency:

- Transfer responsibility for MAGI-based eligibility determination from the FFM to HCFA;
- Consolidate eligibility determination for State-administered public health coverage programs under a single system;
- Improve sustainability of systems and operations;
- Enable staff-level efficiencies to be realized in terms of reduced average cycle time for application processing.
- Reduce the need for contracted staff to aid applicants and members;
- Lower average transaction costs through automation of eligibility determination;
- Facilitate more accurate and timely adjudication of eligibility appeals by consolidating information in one system and providing appeals staff with access to a centralized data source and a single system of record; and

- Support task-based flexible staffing through dynamic workflow status reporting and workflow planning tools.

4. Organizational adaptability:

- Implement and integrate an automated business rules engine to enable updating of rules with less development costs when regulatory changes impact eligibility standards;
- Develop a system that has the flexibility to accommodate the expansion or contraction of current programs, or the establishment of new programs; and
- Better assess current performance and accurately project future business needs.

5. Improved data quality and data integrity:

- Minimize data discrepancies and improve data integrity associated with transmission of applicant eligibility assessments from FFM to HCFA;
- Establish governance structure to better manage data and information, including ownership and accountability;
- Track applications received, approved, denied and abandoned;
- Report performance metrics without the need for manual intervention;
- Audit and track member encounters;
- Prevent duplicate applications⁵ by matching in-process applications and current Medicaid / CHIP enrollment; and
- Enable recognition of superseded “change of circumstance” applications to eliminate casework on previously filed applications.

[Table 6-1](#) defines each of the guiding principles with HCFA relevant examples.

⁵ Duplicate applications can arise from the same person using multiple intake channels to apply. Unlike ‘change of circumstance’ applications, these applications contain the same applicant information even when entered on different dates. Duplicate applications also arise from data integrity issues regarding account transfers from FFM.

Table 6-1 Guiding Principles, Capabilities and Benefits

GUIDING PRINCIPLE	SPECIFIC CAPABILITIES	BENEFITS
Consistent Delivery of Member Services	<p>Provide real time eligibility determination without agency worker intervention, which in turn produces accurate determinations (includes mid-month decisions that are provided on a specific date).</p> <p>Decrease the amount of manual data entry and system intervention that is currently needed.</p> <p>Improve notice efficiency throughout the organization.</p> <p>Improve intake channels via the call center and online portal to increase applicant and member satisfaction.</p> <p>By providing an increased number of self-service intake channels, allow members the opportunity to provide accurate and up-to-date information</p>	<p>Operational</p> <p>Ease of use</p> <p>Business Alignment / Involvement</p> <p>Regulatory Compliance</p>
Optimized Business Operations using Reliable Systems	<p>Reduce complexity of user interfaces to perform system functions.</p> <p>Improve content management system (includes document management) to be in compliance with regulatory and legal statutes.</p> <p>Define and institutionalize operational changes throughout the organization to help streamline processes and implementation efforts. Benefits of institutionalization include predictable processes followed within the organization and commitment to changes by the organization and staff.</p>	<p>Operational</p> <p>System Availability / Stability</p> <p>Supportability</p> <p>Continuity of Operations</p> <p>Standards adoption</p> <p>HCFA Culture</p>
Self-Sufficiency	<p>Assume business and systems responsibility for CHIP Eligibility.</p> <p>Assume business and systems responsibility for MAGI determination from the FFM.</p> <p>Improve sustainability of systems and operations.</p> <p>In-house management of business rules and business processes within systems, as applicable.</p> <p>Increase the number of self-service channels, allowing members to provide up-to-date information.</p>	<p>Operational</p> <p>Supportability</p> <p>Business Alignment / Involvement</p> <p>Regulatory Compliance</p> <p>Business Requirements</p>

GUIDING PRINCIPLE	SPECIFIC CAPABILITIES	BENEFITS
Organizational Adaptability	<p>Implementation and integration of automated rules engine to enable updating rules with less development cost when legislation and federal regulations changes occur.</p> <p>High-level of flexibility to respond to new, changing, or proposed (federal and state) policies.</p> <p>Better assess current performance and accurately forecast future business trends and needs.</p>	<p>Operational Ease of Use</p> <p>Supportability</p> <p>System Availability / Stability</p> <p>Continuity of Operations</p> <p>Standards adoption</p> <p>HCFA Culture</p>
Data Quality and Integrity	<p>Prioritize and report on application processing times.</p> <p>Establish governance required to manage data and information, including its ownership and accountability.</p> <p>Operational tracking of worker productivity, including tracking applications received, approved, denied, and pending applications.</p> <p>Reporting of performance measurements without manual intervention</p> <p>Audit and track member encounters in a year, via multiple channels.</p> <p>Prevent duplicate applications by providing for a match check of current in-process applications and current Medicaid enrollment early in the online application process.</p> <p>Enable recognition of superseded/updated “change of circumstance” applications, to eliminate casework on a previously filed application.</p> <p>Assume business and systems responsibility for Non-MAGI determinations that are currently performed using ACCENT.</p>	<p>Operational System Availability / Stability</p> <p>Business Alignment / Involvement</p> <p>Regulatory Compliance</p> <p>Continuity of Operations</p> <p>Standards adoption</p>

7 SCOPE

The TEDS scope is to develop and implement an integrated system that will be the single State of Tennessee data store for eligibility determinations for health care financial assistance programs. Other systems used to perform customer relationship management for Members and Applicants are expected to integrate within TEDS, to support functions that are currently performed manually.

While determination for other social welfare programs are out-of-scope for TEDS, the design approach ([Section 10.1](#)) supports modularized functionality that is compatible with integrated eligibility and health insurance exchange reference architecture.

7.1 ASSUMPTIONS

The following assumptions are acknowledged as inherent to the future state scope and design. These are considered assumptions because they are not yet implemented/realized. The SI is required to use applicable project change management and approval processes regarding changes in assumptions.

1. **FFM Intake Channel** – The FFM will not “redirect” from the FFM healthcare.gov site to a HCFA site. Consumers will only need to file one application to be considered for all forms of financial assistance health care programs (i.e., both tax subsidy and Medicaid), but the consumer may originate their application either at the FFM site or through one of the HCFA intake channels. The State will continue to receive in-bound account transfers from the FFM.
2. **New Tennessee Pre-Admission Eligibility System (TPAES)** – The State is currently managing a project to replace TPAES with a new system, Tennessee Medical Eligibility Determination System (TMEDS). It is assumed that the new TEDS implementation will have a timeline that accommodates interfacing with TMEDS, not TPAES.
3. **Appropriate Sunset Capabilities** – The roadmap will incorporate the sunseting of replaced technologies and transition capabilities as separate projects, as postimplementation phases after the initial release of new systems.

7.2 DEPENDENCIES

Dependencies define the known synchronization required between the TEDS project and other projects in the MMP.

1. **FFM Account Transfer and Verification Records** – The FFM is evolving in Account Transfer capability. As the FFM changes the data elements and transfer mechanisms, the mating interface to the new TEDS must align. TEDS will perform both inbound “referral for Medicaid/CHIP” from FFM and outbound “referral for advanced premium tax credits (APTC) consideration” account transfers. The FFM will perform electronic verification of applicant-attested data, using the FDSH. Account Transfers will include the applicant’s self-attestation and the verification results from the FFM automated verification processes.

2. **Batch SSI Interface** – Social Security Administration (SSA) will send a file of Supplemental Security Income (SSI) recipients to TEDS on a regular basis. TEDS will automatically receive and process the SSA’s State Data Exchange (SDX) file.
3. **Batch Low Income Subsidy (LIS) Interface** – SSA will send an LIS file to TEDS on a regular basis, which will trigger an automated review for Medicare Savings Program (MSP) eligibility. The new eligibility system will automatically receive and process the SSA’s LIS file.

7.3 CONSTRAINTS

Constraints are defined as known factors that affect the scope and design approach for the new eligibility system. These are considered constraints because they limit the acceptable alternatives for the design approach.

1. **FFM Assessment** – Tennessee is currently a “determination” state, whereby the FFM is both processing applications and determining the eligibility. Tennessee desires to become an “assessment” state, whereby the FFM continues to perform application processing, electronic verifications and eligibility determinations for tax subsidy financial assistance. However, the FFM, instead of determining Medicaid or CHIP eligibility will communicate to eligible consumers that they are potentially eligible for CHIP or Medicaid, and that their account has been transferred to Tennessee for final determination, to be processed by HCFA. Tennessee will not be an “exchange” state, and will not operate a state-level-based insurance exchange.
2. **Intake Channels** – Applications for health care financial assistance can be accepted directly by the State. (Applicants do not have to go to the FFM, but may choose to apply at either the FFM or the State’s Web site.) The roadmap will determine the phase-in of specific intake channel capabilities.
3. **No Wrong Door** – To the greatest extent possible, applicants shall be able to be considered for all applicable healthcare financial assistance via a single streamlined application form process. Thus, if an applicant is determined “not eligible” by the HCFA, then the application will be forwarded to the FFM for consideration for tax subsidy financial assistance. All ineligible applications originated in Tennessee will be forwarded to the FFM, without regard to whether the applicant attested to filing taxes, being claimed as a tax dependent or being a nonfiler (neither tax dependent nor tax filer).
4. **Federal Hub Applicant Verification** – TEDS will have the capability for electronic verifications. The primary source of electronic verifications of identity, age, citizenship / immigration status, and income will be the FDSH integrated verification system, which includes real-time services from SSA, System for Alien Verification Entitlements (SAVE), the Internal Revenue Service (IRS), and Equifax.

5. **Wage Applicant Verification** – TEDS will have capability for electronic verifications of current wages from the following sources:
 - a. State Quarterly Wage Database from the Tennessee Department of Labor and Workforce Development and related State unemployment data sources;
 - b. State Wage Information Collection Agency (SWICA); and
 - c. IRS Disclosure of Information to Federal, State, and Local Agencies (DIFSLA) Computer Matching Program.
6. **Use of FFM Verification Results** – For inbound Account Transfers, TEDS will use an automated rules based “reasonable compatibility” process to determine if additional verifications are needed or if eligibility can be determined based upon the FFM verification results.
7. **Redetermination Verification via Federal Hub** – The redetermination process (for Medicaid and CHIP) within TEDS will include automatically triggering a real-time information verification request from external information suppliers.
8. **Evergreen Verification** – The redetermination process (or change of circumstances reapplication processing) for Medicaid or CHIP will follow an automated rules-based process, such that an individual who has had their citizenship or immigration permanent residency status already verified is not resubmitted for electronic verification (and the member does not need to resubmit proof documents). However, a rules-based automated process will still require reverification where appropriate, for applicants who had submitted temporary immigration information.
9. **Periodic Matching Interfaces** – TEDS will have the ability to receive and process data sources used for posteligibility monitoring, including at a minimum:
 - a. **BENDEX** – SSA Beneficiary Data Exchange System
 - b. **BEERS** – SSA Beneficiary Earnings Exchange Record System
 - c. **PARIS** – Health and Human Services (HHS) Public Assistance Reporting Information System
 - d. **Incarceration Reporting**
10. **Existing Legacy MMIS** – While the new TEDS will be the centralized repository of eligibility information, the enrollment functionality will continue to be performed by the legacy MMIS, interChange (iC). Thus, output interfaces from the new TEDS must be compatible for loading to iC.
11. **FFM Medicaid / CHIP Real-Time Enrollment Verification** – The existing D1H31 real-time interface will continue to be used between the FFM and MMIS iC to verify whether

a person is currently enrolled in Medicaid. A similar process will be used to respond to FFM regarding whether an individual is currently enrolled in CHIP.

7.4 REQUIREMENTS RISK MITIGATION

1. After the procurement of the SI is complete, and the contract has been approved by the State and CMS, HCFA plans to undertake an incremental approach to modernization that allows for the achievement of “Quick Wins” that provide early value and incremental service delivery transformation while building systematically toward a larger, multiyear modernization effort.
2. Evolving Federal and State policy regulations that affect Medicaid eligibility are a risk to requirements. This is mitigated by implementing a design approach that supports configuration.
3. Data element structure and definition may continue to be updated by the FFM, which cascades into necessary changes to assure a mating transfer of information between systems and enterprises. This is mitigated by dedicated resources that monitor and support the account transfer-related processes.

8 CURRENT STATE ASSESSMENT

The Current State Assessment is necessary to support the identification and analysis of the gaps between the current environment and the future state BOM. The current state also identifies the external and internal factors that are impacting the way in which the organization is currently operating, including in-flight projects for new systems and new resource capabilities.

8.1 PROGRAM / PROJECT PROFILE

This section identifies the different benefit aid categories. These health care financial assistance programs are a significant factor to current operations, as new programs may be identified and existing programs will undergo mandated revisions. Individual applicants may be eligible in multiple categories, but the determination calculation hierarchy must assign the individual to a single aid category as their determination outcome.

Each program has specific eligibility business rules. These rules address programs for:

- Children
- Families
- Women
- Aged, Blind & Disabled
- Former Foster Care
- Medicare Cost Sharing

The business process flows ([Section 13](#)) encompass all current state aid benefit categories/programs. The program groups are:

1. Determinations based upon an applicant's MAGI household composition/income, including⁶:
 - a. MAGI Child, age 0 up to 1 year
 - b. MAGI Child, age >1 to 6 years
 - c. MAGI Child, age >6 to 19 years

⁶ These determinations are made by the FFM and account transferred to HCFA. All other program groups are determined by HCFA.

- d. CoverKids, Tennessee’s CHIP Program, (Children and Unborn Children of Pregnant Women)
 - e. Caretaker Relative Adult
 - f. Women – Pregnant (MAGI)
- 2. Presumptive Eligibility Programs⁷
 - a. Deemed Newborn
 - b. Pregnant
 - c. BCC
- 3. CHIP
- 4. Aged, Blind & Disabled (ABD) Institutional/HCBS
- 5. Medicare Cost Sharing:
 - a. Qualified Medicare Beneficiary (QMB),
 - b. Specified Low Income Medicare Beneficiaries (SLMB),
 - c. Qualified Individuals (QI 1) and
 - d. Qualified Disabled Working Individuals (QDWI).
- 6. Programs via Department of Children’s Services (DCS)
 - a. Adoption Assistance
 - b. Foster Care
- 7. Former Foster Care Individual
- 8. Women – Pregnant Medically Needy
- 9. Child – Medically Needy
- 10. ABD SSI Recipient

⁷ Hospital presumptive eligibility policy is in-progress and has not been formally released.

11. ABD SSI-Related Programs (Pickle/Pass Along, Disabled Adult Child or Widow/Widower)
12. Emergency Medical Services (EMS)
13. Standard/Transitional/Extended:
 - a. Standard Uninsured Child (<19 years old Rollover from Medicaid)
 - b. Standard Medically Eligible Child (<19 years old Rollover from Medicaid)
 - c. Transitional/Extended Medicaid (Children, pregnant women and caretaker relatives who lose Medicaid due to an increase in income or spousal support)

Each subsection below traces the general application and eligibility determination processes for each category of eligibility outcome, sequenced in order from most frequent to least frequent type of application. Inconsistent applications, which have a significant volume, are described in a separate section.

8.1.1 FFM Determinations

The highest volume of new applicants is generated from the FFM. Application input channels to the FFM include:

- Self-service portal, with or without in-person assistance
- Via phone to FFM call center, as Tennessee Health Connect (TNHC) does not intake FFM applications
- Mail to FFM processing center
- Applications that are faxed to TNHC for “Emergency Medical Services” are processed by Member Services.
- All other FFM applications arriving at TNHC (via fax or mail) are unsolicited, and are packaged for bulk mail to the FFM processing center in London, KY.
- The FFM sends Account Transfers to State of TN, including:
 - Individuals that are determined by FFM to be eligible for CHIP or Medicaid, and
 - Account transfers that are referrals by FFM, for State to get more information to consider the individual for Medicaid or CHIP on basis other than MAGI.

In September 2015, the volume of applications transferred monthly from the FFM included⁸:

- 5596 Medicaid determinations
- 203 CHIP determinations
- 3848 Non-MAGI Referrals from FFM⁹

8.1.2 Presumptive Eligibility Determination

HCFA generates temporary determinations for presumptive eligibility, where the determination is initially done by the provider or a partner State agency. Because the determination is temporary, the individual is prompted to submit an FFM application. After processing at FFM, the individual's application is routed to TN through the Account Transfer process. The presumptive eligibility categories include:

- BCC, where presumptive eligibility is determined by staff at the Department of Health and sent via fax to HCFA Eligibility Group.
- Current Foster Care, where the temporary eligibility process is initiated by DCS with direct entry into ACCENT.
- Pregnant Woman Medicaid, where the presumptive eligibility is entered into the Patient Tracking Billing Management Information System (PTBMIS), an AS400 system, by staff at Department of Health and batch transferred into iC.
- CoverKids (CHIP) program for unborn babies of pregnant women, where the presumptive eligibility is determined by the provider hospital/authorized birthing center. The provider uses micro-system spreadsheets to communicate presumptive eligibility of pregnant women. The provider faxes applications to the CHIP processing center (currently managed by contractor AHS).
- Newborns of current members, where the presumptive eligibility is determined by the provider hospital/authorized birthing center. The provider retains the paper "Newborn Presumptive Eligibility" applications. The provider uses a web-based enrollment verification system to also communicate presumptive eligibility of Medicaid newborns. For presumptive CHIP newborns, the provider faxes applications to the CHIP processing center (currently managed by contractor AHS). Provider-determined denials of both

⁸ This data is from Hewlett Packard (HP) Operations.

⁹ This quantity includes primarily referrals for potential institutional/HCBS, SSI-related, and medically needy categories, and also includes referrals for potential emergency medical services, and potential former foster care.

Medicaid and CHIP are not communicated to HCFA. However, the provider also refers these parents to submit an FFM application.

Information from presumptive eligibility categories was not available to include in the current state analysis. However, in September 2015, HCFA Member Services received 2,247 individual applicants that were for deemed newborns. These individuals are enrolled in Medicaid on the basis of birth to a mother who was an enrolled TennCare member.

8.1.3 CHIP Determinations

In addition to intake from FFM Account Transfer, the CHIP program (marketed for consumers as CoverKids in TN), also receives paper applications that are mailed or faxed to the CoverKids contact center. Effective 12/16/2015, all nonpregnant applicants will be directed to apply to FFM. Pregnant applicants will still be able to apply by faxing or mailing the FFM application form. When an applicant is determined ineligible for CHIP, the eligibility notice encourages them to apply for healthcare financial assistance at the FFM. (Application is not forwarded to FFM on their behalf.)

Effective January 2016, the CHIP program is managed by contractor Automated Healthcare Systems (AHS), including the CHIP call center. (The previous state contractor was Maximus.) Initially the AHS-CHIP call center will continue with the separate phone number from TNHC, but both call centers (CHIP & TNHC) will be colocated and managed by AHS. They will use the same Customer Relationship Management (CRM) and Document Management System (DMS) for both contracts, but the configuration may be slightly different and the data stored separately.

AHS will also perform other CHIP responsibilities, including:

- Performing verifications of identity and Social Security Number (SSN) in accordance with State of TN requirements,
 - The State Verification and Exchange System (SVES) verification method used by Maximus will no longer be used.
 - AHS will not verify income or citizenship/immigration with electronic sources.
- Using one-off application processing “MAGI-in-the-cloud” tool to perform determinations,
- Enrolling the newborns to add to a mother who is already enrolled in CHIP and gives birth,
- Maintaining the current CHIP customer service of member address changes, phone numbers, data corrections, etc.

- Loading the H15 FFM Account Transfer file of CHIP-eligible applicants into enrollment. (The file from FFM is preprocessed by state contractor operations Hewlett-Packard (HP) and then sent to AHS as a separate, parsed file.)

As part of Future State analysis, the scope and integration of AHS operations were analyzed, including:

- Performing redeterminations,
- Resolving inconsistent CHIP applications,
- Maintaining database that is accessible and shared with the Eligibility Operations Group (EOG) caseworkers and Appeals work unit.

In current state, when AHS enrolls an applicant for CHIP, the enrollment data is not shared with the MMIS iC system. It is maintained in a separate database. When FFM contacts TN for real-time H31 verification of Medicaid/CHIP enrollment, then TN (MMIS HP Production Control) sends an error code response indicating that CHIP enrollment data cannot be provided by State of TN.

Information regarding the volume of applications processed for CHIP was not timely available to include in this document.

8.1.4 Long-Term Services and Supports (LTSS) /Institutional/HCBS Medicaid Determinations

The individual submits a TN paper LTSS/MSP application, by either mail or fax to TN Health Connection. Alternatively, FFM applications are account transferred to State of TN, as referrals for consideration for Medicaid on a basis other than MAGI. The call center outreaches to the individual. The long-term care provider performs a medical evaluation, to determine the level of care currently needed by the individual, entering the information into the TPAES system. Additional information sufficient to determine eligibility is requested and collected, from the individual and provider. Manual methods are then used to evaluate the financial and nonfinancial submitted information, including the status entered in TPAES. Micro-systems track the case, which is then entered into the ACCENT system.

In September 2015, HCFA Member Services received 2,024 applications via paper applications for long-term services and supports. These applications typically apply for a single applicant, but occasionally a single application includes multiple potential LTSS individuals. (Some of these individuals may also have filed FFM applications, and have duplicate intake from that channel.)

8.1.5 Medicare Savings Program (MSP) Determinations

The individual submits a TN paper LTSS/MSP application, by either mail or fax to TN Health Connection. (These individuals may or may not be already enrolled in Medicaid.) Additional information sufficient to determine eligibility is requested by state staff and collected from the

individual. Manual methods are then used to evaluate the submitted financial and nonfinancial information. Micro-systems track the case, which is then entered into the ACCENT system.

In September 2015, HCFA Member Services received 2,060 applications for MSP, consolidated from all input channels.

8.1.6 Former Foster Care and Medically Needy Determinations

Both potentially Former Foster Care and potentially Medically Needy FFM applications are account transferred to HCFA, as referrals for consideration for Medicaid on a basis other than MAGI-income categories. This occurs when an applicant does not meet MAGI category income ranges, and has indicated a profile (such as former foster care) or has requested “full determination” evaluation of eligibility using Non-MAGI criteria.

FFM batch records are preprocessed and loaded to TN Health Connection. The call center outreaches to the individual. Additional information sufficient to determine eligibility is requested and collected. Manual methods are then used to evaluate the financial and nonfinancial submitted information. Micro-systems track the case, which is then entered into the ACCENT system.

In September 2015, there were 1,731 applications referred from the FFM, identified to be processed for potential “Non-MAGI” basis determination for one or more individuals on the application.

8.1.7 Supplementary Security Income Related Determinations

When an individual applies for SSI at the SSA and is approved, they are automatically also enrolled in Medicaid. The SSA sends the SDX file of new SSI recipients. This is compared against iC, to identify individuals that are already enrolled in Medicaid (from qualifying in a different category) and loads the SSI eligibility. Via the same SDX file, the SSA notifies HCFA when an individual’s SSI benefits will change amount or terminate.

Potential Medicare Savings Program Pickle Passalong, Disabled Adult Child and Widow/Widower applications are account transferred from the FFM to HCFA, as referrals for consideration for Medicaid on a basis other than MAGI-income categories. This occurs when an applicant indicates on their application that they “received both an SSI check and a Social Security check in the same month at least once since April 1977 and still receive a Social Security check.” This same question is used to identify potential individuals who apply directly to HCFA using the LTSS/Hospice/MSP paper application form.

Manual and micro-system methods are used to open, track cases and perform eligibility determinations for individuals who are losing SSI, to determine if the individual will qualify for an SSI-related category (such as Pickle Pass Along, Disabled Adult Child or Widow/Widower), or if they qualify for another category of Medicaid.

Specific monthly volume application data regarding SSI-related categories was not available for current state analysis.

8.1.8 Emergency Medical Services (EMS)

Applications for EMS have three intake channels:

- FFM’s online portal (accessed via self-service, with or without assistance)
- FFM call center (enters verbal information into the online portal)
- TNHC receipt of faxed applications, with special hand-marking “Emergency” from hospital service providers

TNHC will forward to State of TN for verification that services provided were of an “emergency” nature, and that applicant meets all other financial and nonfinancial requirements for an applicable category. If an individual meets all financial and nonfinancial criteria for a TennCare Medicaid category except for citizenship, then HCFA will determine if there is an emergency that qualifies them for EMS. In September 2015, HCFA received 286 applicants via faxed paper applications for EMS.

Via Account Transfer, the FFM provides referrals for individuals that may be potentially eligible for EMS. For September 2015, these referrals would be included in the 1,731 applications that were referred from the FFM and identified to be processed for potential “Non-MAGI” basis determination (section 8.1.6 above).

8.1.9 Other Determinations

During the redetermination process, the individual is evaluated for continuing eligibility in their current category of eligibility. If no longer eligible for that category, then the individual is considered for other applicable categories. For children under age 19, the State has additional categories that are used during the redetermination process:

- TennCare Standard
- TennCare Standard Medically Eligible

Individuals over age 19 may also be considered for temporary benefits in the Transitional/Extended Medicaid category, if they would lose Medicaid eligibility because of an increase in income (either applicant’s or through spousal support/household income increase).

The redetermination process is a partially out-sourced process.

8.1.10 Applications with Inconsistencies

When an applicant’s submitted data to the FFM is not reasonably compatible (as defined by federally mandated rules) with electronic sources of information, then the applicant is in an “inconsistent” status. If the applicant is included in the Medicaid household of other applicants (such as a parent who is contributing income for a child’s household), then their determinations

are also affected. These applicants do not have a determination outcome until the inconsistency status is resolved. The FFM provides the applicant data to HCFA via weekly files.

The HCFA resolution process is to reach out to the applicant and request information to substantiate the applicant's claimed data regarding income amount, citizenship/immigration status, etc. The information requested includes appropriate records/documents to prove the applicant's information submitted on the application. The applicant may also choose to revise application information, and provide proof of the revised amount.

In September 2015, State of TN received 4,937 applicants with inconsistencies. Of these, 19% (934 applicants) were able to be resolved by matching to SNAP data from members currently enrolled in the SNAP/TANF program. The other 81% (4,003 applicants) did not have a match when compared to current SNAP/TANF enrollment checks.

In the current state, an in-flight project will outsource (beginning early 2016) the process for inconsistency resolution, to include assisting consumers via outreach, scanning and indexing consumer's submitted documents and generating notices to the consumer. The system will provide an electronic workflow access for HCFA caseworkers to be able to view an electronic (scanned copy) of the consumer's submitted documentation, with comparison of proof document to attested application data via HCFA caseworker review. System automation will generate notices and message the enrollment system for batch processes such as "received no response within allowed time limit." If the inconsistency is resolved, then HCFA caseworkers determine the application.

8.2 BUSINESS CONTEXT MODEL

The Context Model ([Figure 8-1](#)) shows an overview of the interactions between the external stakeholders and the HCFA enterprise for Medicaid. HCFA performs a wide variety of functions above and beyond managing the delivery of Medicaid. Hence, the focus of this diagram is limited to the HCFA Member Services "enterprise," which is focused on Medicaid eligibility activities. These interactions identify the scope of the various business processes and IT systems that need to be transformed in order to enhance service delivery and streamline processes.

To create the context model, advisory service consultants leveraged the KERA repository (specifically the KERA Context Model), to facilitate a dialog with the State team by providing reference implementation of typical external stakeholders and interactions that are generic for Medicaid-related government operations.

The external stakeholders are organized into groups that are described below:

- **Clients** – This group includes applicants, members, and authorized representatives. They interact with the system for activities such as applying for benefits, providing verifications, and appeals. Member Services also interacts with members for activities such as outreach and notifications.

- **Business Partners** – These are contracted providers that perform service delivery for HCFA Member Services. The interactions include activities such as eligibility determination and application referrals.
- **Suppliers** – HCFA also interacts with a variety of various external agencies, including Federal partners, whom mostly provide data in order to support applicant/member information verifications. This group also includes a wide variety of stakeholders such as DCS, Department of Health, and Department of Labor and Workforce Development to name a few. The various providers are listed on the diagram in detail.
- **Governing Organizations** – This group includes oversight agencies such as legislating bodies. The interactions with this stakeholder group include activities such as review of complaints and grievances, State and Federal reporting, compliance information, and policies.

The Context Model ([Figure 8-1](#)) displays the large number of external stakeholders Member Services must maintain relationships with, and the complexity of the interactions which occur in with them in order to support the delivery of Medicaid throughout the State.

- In this diagram, external stakeholders that have a unique relationship have a direct line to HCFA, which is labeled to identify the interaction.
- External stakeholders are grouped into “boxes.” An interaction that is diagrammed between the “box” and HCFA is modeled as a common interaction, which applies to all the stakeholders included within the “box.”
 - For example, both SSA and Department of Homeland Security receive a verification request from HCFA, and send a verification response to HCFA.

In summary, the current state HCFA enterprise requires interaction with a wide variety of external stakeholders to:

- Manage and deliver benefits, serving constituents,
- Interact with a wide variety of State and Federal agencies to perform duties of regulatory compliance and consumer protection, and
- Exchange of information with external resources to support a predictable budget.

8.3 CURRENT STATE BUSINESS CAPABILITY MODEL

Comparing the State's operational models to the KERA reference operating model revealed that Medicaid services are highly manual due to limited automation capabilities within the HCFA enterprise. Information is in separate silos and information sharing is cumbersome. Current state processes are heavily manual. Manual processes are typically more error prone and increase the risk that processes and policies will be applied inconsistently. Manual processes also impact processing times and accuracy of eligibility determinations.

[Section 1.2](#) itemizes specific issues and challenges regarding current operations.

The KERA Business Capability reference model classifies all business capabilities into five top-level capability groups. [APPENDIX C](#) explains the KERA decomposition rubric for capabilities grouping.

In this stage of current state analysis, advisory service consultants leveraged the KERA repository to facilitate a dialog with the State team. KERA provides a reference implementation of typical internal stakeholder interactions that are generic for Medicaid. The Operating Model used for this scope is described as an open-box view that depicts the same information as the context model, but includes the internal stakeholders, interactions, business capabilities, and business services.

These internal interactions are necessary to support the external interactions that are occurring between stakeholders. These organizations perform many functions above and beyond the scope of this document; therefore, the depiction is limited to include only the Medicaid-related functionality and delivery. It is important to note that the services encapsulate all of the various business processes required to provide the identified business function.

[illegible]

8.3.1 Current Business Operating Model

[Figure 8-2](#) models all the interactions of the HCFA functional groups, including:

- EOG
- TennCare Eligibility Policy
- Service Center Contracts
- Performance Management
- Appeals
- TNHC
- TennCare Information Systems (TCIS), and
- HCFA Eligibility-related Interactions External to Member Services

[APPENDIX F:](#) provides a separate capabilities and interactions model for each functional area. The detail models decompose the consolidated view of [Figure 8-2](#) into one model for each the eight functional groups. Each detail model includes only the flows relevant to each of the specific internal stakeholders.

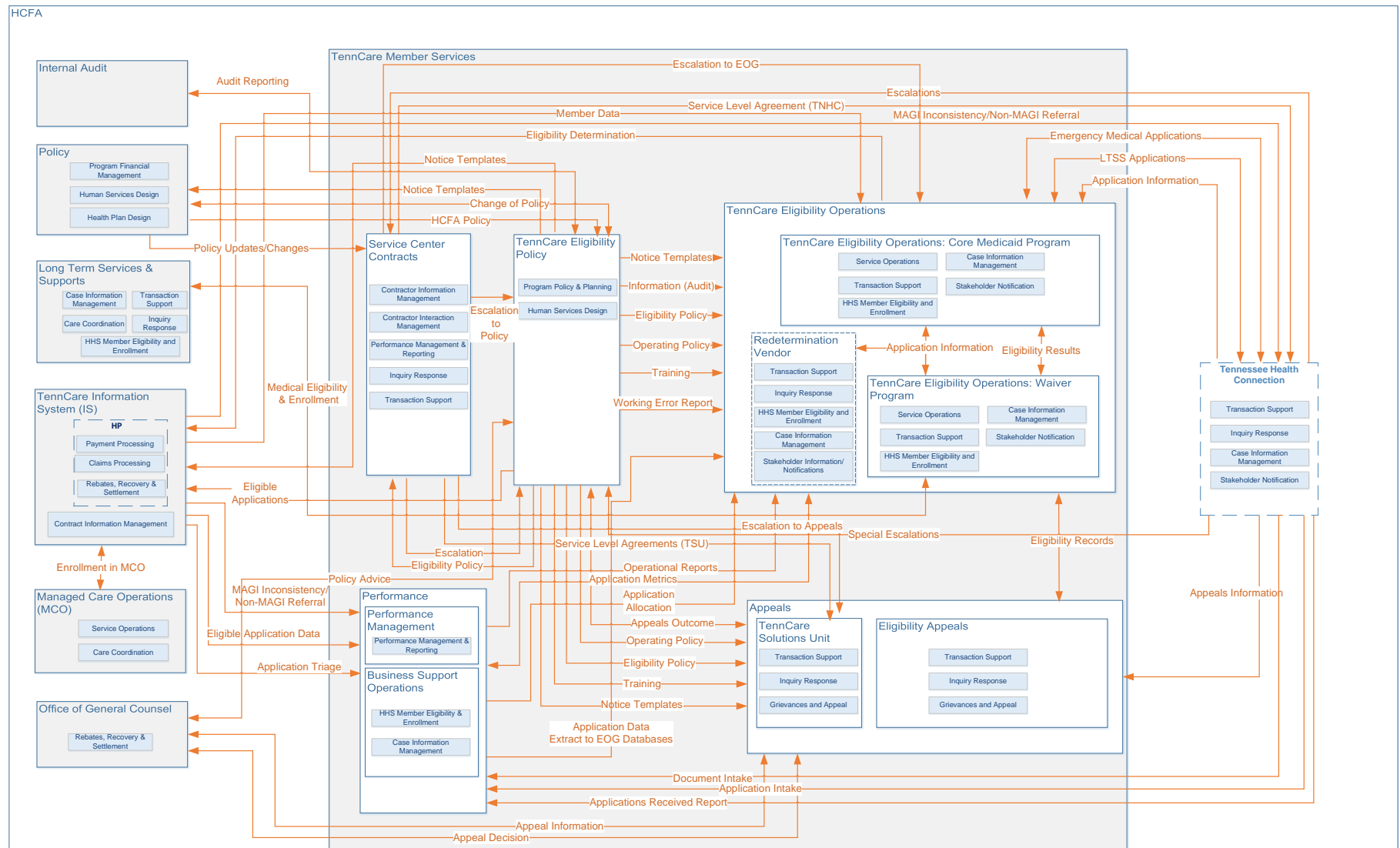
These organizational units perform many functions above and beyond the scope of this review, and as a result, the depiction is limited to Medicaid-related functionality and delivery. It is important to note that the services encapsulate all of the various business processes required to provide the identified business function.

8.3.2 EOG

[Figure 8-2](#) includes the current state interactions with EOG. As shown in the detail view of Appendix D, [Figure F-1](#), EOG is the primary organization for eligibility functions, and includes three main capabilities:

- Core Medicaid Program – including functionality for service operations, transaction support, eligibility and enrollment, case information management and stakeholder notification.
- Redetermination Vendor Operations – includes functionality for transaction support, inquiry response, eligibility and enrollment, case information management and stakeholder information.
- Waiver Program – includes same functionality types as Core, but with rules specific to the waiver program operations.

Figure 8-2 HCFA Consolidated Interactions – Operating Mode



EOG receives application information and provides eligibility determinations. To produce the determinations, EOG receives a wide variety of policy directives. While there are numerous different specific eligibility categories, the major types of incoming applications are:

- General (Women, Parents/Caretaker Relatives and Children)
- Referrals for resolving MAGI inconsistencies and Non-MAGI full determinations
- Applications for EMS
- Application for long-term care and service supports, including MSP

Medical eligibility and enrollment information flows into the LTSS Unit from the facility health services provider's pre-admission evaluation and post-admission case management to assess eligibility and maintain services across a member's changing circumstances and medical needs.

If an applicant has filed an appeal, then the applicant's information is also shared with the Appeals workgroup.

8.3.3 TennCare Eligibility Policy Group

[Figure 8-2](#) includes the current state interactions with the TennCare Eligibility Policy Group.

The TennCare Eligibility Policy Group is responsible for communicating the rules and regulations that control the outcome of eligibility determinations, as well as the manner in which business processes are performed. As shown in the detail view of

[Figure F-2](#), Eligibility Policy Group is composed of three main capabilities:

- Program Policy & Planning – directs benefit levels and eligibility standards,
- Human Services Design – directs service delivery, and
- Stakeholder Notification – directs communication.

The primary interactions direct the TennCare EOG and the Appeals Group with notice templates, eligibility determination policy, operations process policy, and training. Notice templates and eligibility policy also flow to the Service Center Contracts group and the TCIS.

In addition to the above interactions, the TennCare Eligibility Policy Group also provides the TennCare EOG with audit information and initiatives regarding error reporting.

The Policy Group communicates to external stakeholders, providing:

- Policy advice to Office of General Counsel

- Audit reporting to Internal Audit
- Exchange of eligibility policy information with the HCFA Policy group, which in turn provides TennCare eligibility policy to EOG.

8.3.4 Service Center Contracts

[Figure 8-2](#) includes the current state interactions with the Service Center Contracts operations.

The TennCare Service Center Contracts is responsible for ensuring Service Center, including TennCare Solutions Unit (TSU) and TNHC vendor contract compliance and consequently the center's service delivery to applicants, members, and operational support to the EOG and Eligibility Policy groups. As shown in the detail view of [Figure F-3](#), Service Center Contracts is composed of five main capabilities:

1. Contractor Information Management

- Contractor Information Management capability grouping deals with managing all operational aspects of contractor information. It includes creating a contractor record and management of contractor information to share across/enable usage by multiple human services agencies/programs, including role-based rules for information retrieval/sharing.

2. Contractor Interaction Management,

- Contractor Interaction Management capability grouping manages interactions with contractors. This includes the management of contractor grievances and appeals and the activities necessary to reimburse contractors for services rendered based on a contract executed between HCFA and the contractor. When a contractor renders services on behalf of a Medicaid member, the contractor invoices Medicaid according to the specifics defined in the contract. Agency staff responsible for Contract Administration process invoices according to the State Medicaid Agency (SMA) policy including validation of the invoice content to reimbursement details defined in the contract.

3. Performance Management & Reporting,

- Performance Management and Reporting capability grouping handles tracking of operations and project execution against key performance indicators and performance reporting.

4. Inquiry Response, and

- Inquiry response is a broad capability of stakeholder support. It includes inquiries from HCFA, from other State agencies/programs, from authorized partners/service providers and from consumer members.

5. Transaction Support.

- Transaction Support is the routine creation, assessment, assignment, tracking, communication, and resolution of various transactions of stakeholder support to better align stakeholders and the agency. It includes the intake of consumer applicant documents, the processing of applications and appeals, and the routine updates to in-progress member applications/cases.

The primary inputs are the call data and recordings within the CRM and vendor performance metrics from which quality reports are developed to verify the vendor's contract compliance. Inputs from TNHC generally go straight to the business unit or get loaded into databases. The Service Center Contracts Group has an escalation information flow to the TennCare Eligibility Policy Group, EOG, and Eligibility Appeals. The Service Center Contracts Group triages and tracks the escalation to completion by the other teams within Member Services

The Service Center Contracts Group generates and maintains Service Level Agreements with the Appeals group and TNHC.

8.3.5 Performance Management

[Figure 8-2](#) includes the current state interactions with the Performance Management Group.

As shown in the detail view of [Figure F-4](#), the Performance Management Group is composed of two main capabilities:

- Business Support Operations – document intake of verifications returned for MAGI inconsistencies, returned mail, registration of applications received at TNHC as well as H15 Non-MAGI referrals.
- Performance Management – database development and maintenance, case record creation in the databases, and tracking of operational performance including the creation of management and quality reports.

The primary input flows are document intake and application intake from TNHC and application records for Non-MAGI from the H15 process.

TCIS provides to Performance Management group:

- Eligible Application Data (H15 Non-MAGI referrals from FFM)
- Application Triage, and
- MAGI Inconsistency (from FFM).

The Performance Management Group supports caseload management by providing tools for application allocation to the appropriate units within EOG, and by exchanging information with EOG to status application metrics.

8.3.6 Appeals

[Figure 8-2](#) includes the current state interactions with the Appeals Group.

As shown in the detail view of [Figure F-5](#), the Appeals Group is composed of two main capabilities:

- TSU and
- Eligibility Appeals

Each of the above units performs transaction support, inquiry response, grievance/appeal and performance management and reporting.

The primary input flow is appeals intake information from TNHC. Appeals primarily exchanges eligibility records information with EOG. The Appeals work group receives Service Level Agreements from the Service Center Contracts.

The Appeals work group exchanges appeal information and appeal decisions information with the Office of General Counsel, as well as appeals outcomes with the TennCare Eligibility Group.

The Appeals work group receives direction from TennCare Eligibility Policy in the form of notice templates, eligibility determination policy, operations process policy, and training.

Appeals serves members by assuring uniform and timely application of eligibility policy.

8.3.7 TNHC

[Figure 8-2](#) includes the current state interactions with TNHC.

As shown in the detail view of [Figure F-6](#), TNHC includes four main capabilities related to eligibility:

- Transaction Support
- Inquiry Response
- Case Information Management, and
- Stakeholder Notification.

TNHC operates in accordance with a Service Level Agreement, supporting TennCare Eligibility Operations with application information.

TNHC exchanges information with the EOG, including:

- General application information
- Applications for EMS
- Application for long-term care and service supports, including MSP

TNHC provides:

- Appeals information to the Appeals group
- Document intake and Application intake to the Business Support group

After processing applications, TNHC identifies exceptions and provides escalations to the appropriate group based upon the specific issue, including the Service Center Contracts group, the Appeals Unit or the EOG. Special escalations (nonroutine) are sent to the TennCare Eligibility Policy group.

8.3.8 TennCare Information Systems (TCIS)

[Figure 8-2](#) includes the current state interactions with TCIS.

As shown in the detail view of [Figure F-7](#), TCIS includes data repositories and associated functionality to support seven main capabilities. Not all of the capabilities are related specifically to eligibility. In addition, capabilities that do support eligibility are shared capabilities; they support eligibility functionality as well as other business functions.

- HP Vendor Production Control – providing enrollment activities, payment processing, claims processing and rebates, recovery and settlement actions.
- Contract information management
- Business management
- IT strategy & architecture
- IT solution development
- IT operations support, and
- IT management

TCIS provides the member data for TennCare Eligibility Operations.

TCIS provides the Performance Group:

- Eligible application data
- Application triage, and
- MAGI Inconsistency/Non-MAGI Referrals.

TCIS receives eligibility determinations from the EOG, and notice templates and eligible applications from the TennCare Eligibility Policy group.

TCIS maintains the information exchange to/from Managed Care Organizations. (MCO).

8.3.9 Interactions External to Member Services

[Figure 8-2](#) includes the current state interactions with information flows that are external to member services, but within HCFA.

These flows have all been identified above, described within the sections for individual TennCare Member Services. As shown in the detail view of [Figure F-8](#), the HCFA functions that are external to member services and directly impact eligibility operations include capabilities for:

- HCFA Internal Audit
- HCFA Policy – design of case worker process for member eligibility assistance and health plan design
- HCFA Office of General Counsel – supporting subrogations, estate recovery and settlement.
- HCFA LTSS – case information management, transaction support, stakeholder notification, inquiry response, eligibility and enrollment.
- TCIS, and
- Managed Care Operations – service operations and care coordination.

Two HCFA entities are critical in the exchange of enrollment information: TCIS and MCOs, including service operations and case coordination.

8.4 OVERALL BUSINESS ENVIRONMENT & CONTEXT

The current state System and Data Flow map is shown in [Figure 8-3](#). In this diagram, files that are used to batch transfer information from one system to another system are identified with the file name currently used by the HCFA organization.

The complexity of the current information technology environment is a direct result of the current business processes and operations. Various small-scope bridge systems, primarily stand-alone micro-systems, were developed over time due to limitations of the mainframe platform and the need to provide functionality for caseworkers to meet statutory and legal requirements. This IT environment is in silos across HCFA and is supported by numerous vendors and technologies, which results in increased workload for caseworkers serving applicants and members on a day-to-day basis.

The major TennCare systems are summarized in [Table 8-1](#), Current State Inventory of IT Systems, along with any baseline expectation for their replacement/modification by an integrated eligibility system.

8.4.1 ACCENT System

ACCENT is DHS's legacy eligibility and case management system. The System was transferred from Ohio and fully deployed in Tennessee in 1993. This mainframe system provides fully integrated data processing support for the determination of applicant eligibility, benefit calculation and issuance, financial accounting, and management reporting. ACCENT supports many of the DHS's major programs such as TANF, SNAP, and TennCare – the State's Medicaid program. Because of the legacy database structure of ACCENT, changes to a member's income can affect both Medicaid and SNAP/TANF. For example, updating the field as a result of an application for healthcare financial assistance could also affect the member's SNAP/TANF eligibility.

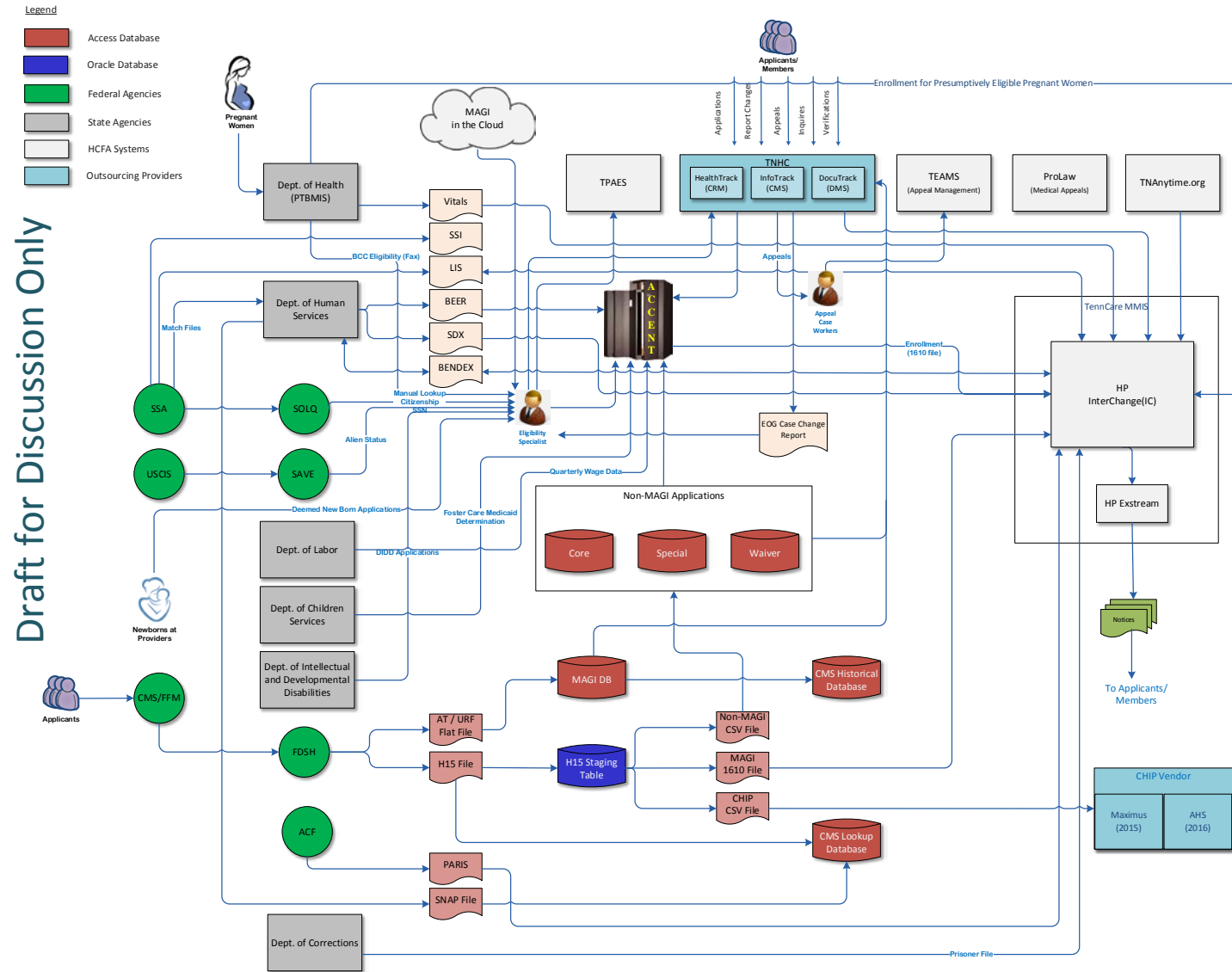
8.4.2 HCFA Member Service Micro Systems

HCFA has a number of smaller ancillary systems that it uses to support specialized workflows. The expectation is that they will be replaced by the new eligibility system and it will not be necessary to convert data from these systems.

8.4.3 iC System (TennCare MIS)

HP's iC healthcare platform is a federally certified system that is being used or implemented in more than a dozen states. Through an Enhancement 10 project, HCFA implemented a Service Oriented Architecture (SOA) infrastructure to provide an integrated platform that includes modified MMIS eligibility-related interfaces. This system is the primary support for TennCare's MCO business model. It is the system of record for enrollment. In the current state, some eligibility interfaces and records are directly through iC, not ACCENT. For example, account transfers from the FFM are interfaced through iC. The SSA also interfaces directly to iC, via the SDX file, for enrollment of new SSI recipients.

Figure 8-3 HCFA Current Systems Data Flow



8.4.4 TNHC

TNHC is an outsourced customer contact center for TennCare. TNHC utilizes a suite of business applications for support of call centers, customer relation management, and document management functionalities. The new eligibility system will integrate with TNHC applications to support TNHC workflows.

Table 8-1 HCFA Systems Replacement or Modification Recommendations

#	SYSTEM	DESCRIPTION	REPLACEMENT OR REUSE
1	ACCENT	ACCENT is a mainframe system that supports eligibility and case management functionalities for SNAP, TANF, and Medicaid. ACCENT does not support MAGI determination. Currently the State relies on the FFM for MAGI determination. The new eligibility system will be able to perform both a MAGI determination or be able to accept a transferred MAGI eligibility determination from the FFM to HCFA.	Medicaid functionalities within ACCENT will be replaced by the new Eligibility System. SNAP/TANF integrated functionality to be determined during Future State analysis.
2	Account Transfer Process (ATP)	Given delays in the Eligibility System deployment schedule, HCFA executed an eligibility determination contingency plan to receive MAGI Applicant Eligibility Determinations and Non-MAGI Applications (Account Transfers) from the FFM and continued to use ACCENT to process un-adjudicated Non-MAGI applications. Eligible MAGI applications are transferred from the FFM as determinations, which are forwarded to enrollment for CHIP or Medicaid. TN uses a heavily manual process to perform MAGI determinations on applications that were transferred from FFM as “pending due to inconsistency”.	The current Account Transfer Processes will be appropriately revised for TEDS to transfer applications outbound to the FFM via account transfer from the new Eligibility System. Because Tennessee will not be an Exchange State, Healthcare.gov will still be collecting applications and forwarding via an inbound account transfer to the new TEDS solution.

#	SYSTEM	DESCRIPTION	REPLACEMENT OR REUSE
3	interChange (iC)	This is the State's MMIS. It is currently operated by HP (contractor). The system supports the TennCare's Managed Care business model.	This system will not be replaced by the new Eligibility System. However, certain functionalities currently done within iC will be done in the new Eligibility System, to be determined during Future State analysis.
4	AHS	AHS provides health benefits services to CoverKids – Tennessee's CHIP.	The new eligibility system will assume all CHIP scope currently being handled by AHS. Only the customer contact management/call center will remain within AHS scope.
5	Micro Systems	Since implementation of a Tennessee Integrated Eligibility System has been delayed, HCFA has developed a series of micro systems as stop-gap measures. The Micro Systems are used to track applications and to support the caseworker's workflows.	Micro Systems will be replaced by the new Eligibility System.
6	Tennessee Eligibility Appeals Management System (TEAMS)	TEAMS is the case management system for appeals. This system does not have workflow management capability.	TEAMS will be replaced with functionality in the new Eligibility System.
7	TNHC Service Center Business Support Suite	A suite of business applications used by TNHC to support call centers, customer relation management, and document management functionalities. TNHC is an outsourced contact center. The systems are out of the scope of Eligibility System.	The Systems will not be replaced by the new Eligibility System. However, the TNHC applications are under consideration for integration with the eligibility system, to support functions currently performed in manual processes. This will be determined

#	SYSTEM	DESCRIPTION	REPLACEMENT OR REUSE
			during Future State analysis.
8	TPAES	TPAES is the system for assessing and storing the medical level of need, prior to admission to a nursing home (or similar institutional facility) for Tennessee's LTSS programs.	TPAES replacement project, now called TMEDS, is currently in progress. As currently planned, it will enter UAT in January 2016.

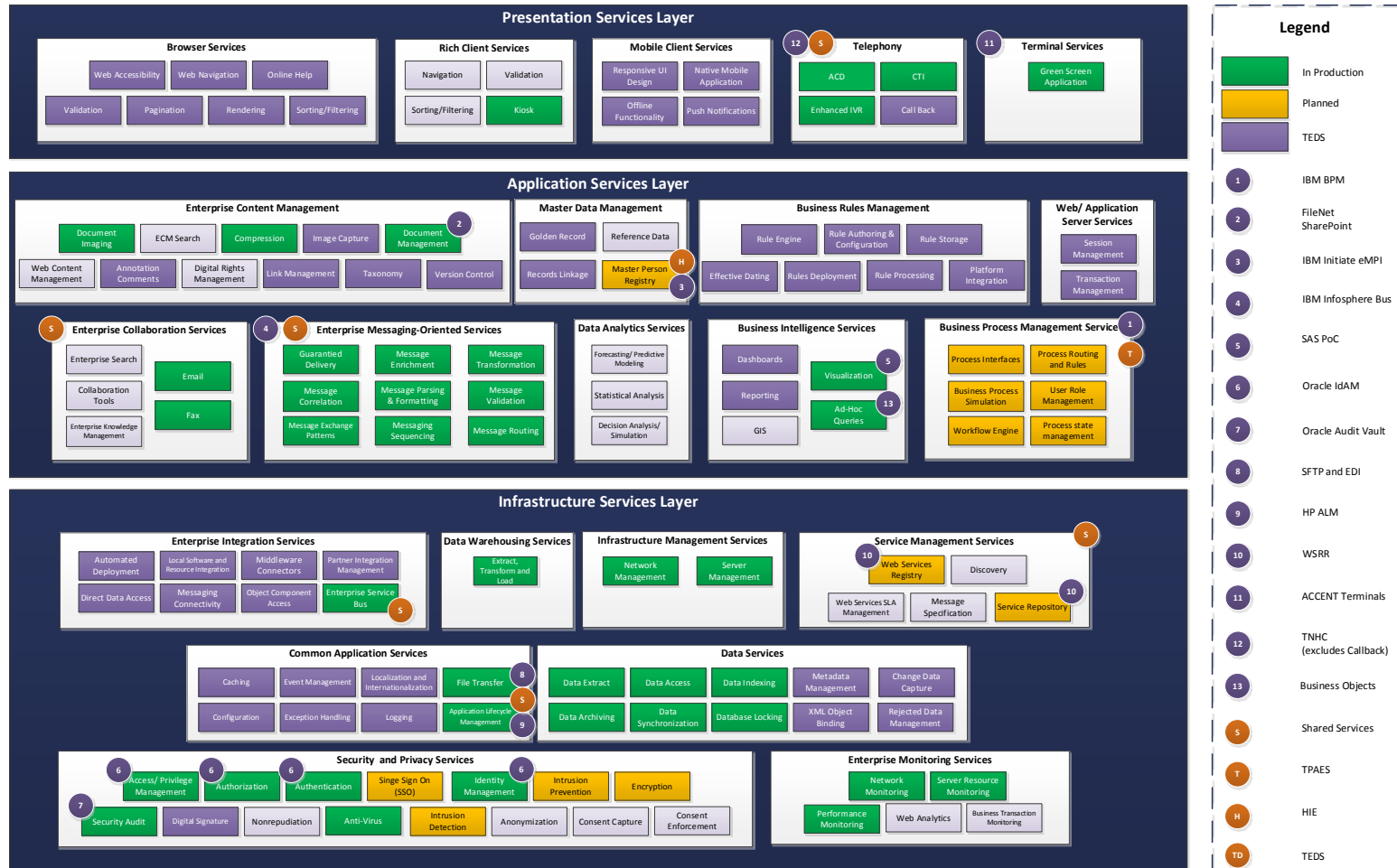
8.4.5 Assessment of Current IT Systems

The current state of information technology is assessed using [Figure 8-4](#), Heat Map. The framework of technology capabilities are leveraged from industry standards for enterprise wide technology to support integrated business operations, using color codes as shown in [Table 8-2](#). The Heat Map also inventories which Tennessee data system controls each specified technology.

Table 8-2 Heat Map of Software Service Capabilities

SOFTWARE SERVICE CAPABILITY COLOR LEGEND	
Gray	As a heat map, the “gray cold” functionalities are technologies that are not available within the current state of the enterprise. Functionalities shown in “gray” will be evaluated for prioritization/inclusion/relevance for the future state.
Green	“Green” indicates functionalities that are implemented into routine current operations and are currently maintained.
Yellow	“Yellow” indicates planned functionality for improvement projects that are in-flight progress during the current state assessment.

Figure 8-4 Heat Map of HCFA Software Service Capabilities



In summary, the Heat Map reveals:

- Presentation Layer includes Telephony and Terminal services in production.
 - Browser services and Mobile applicant/member services are nonexistent.
 - Rich Client production services are limited to FFM kiosks.
- Application Services Layer has planned projects for business rules management.
 - Enterprise content management (ECM) is nonexistent except for production implemented document management.
 - Opportunities for technical improvements could include Master Data Management, Web/Application Server Services, Data Analytics, BI services, and Enterprise Collaboration Services.
- The Infrastructure Services Layer has limited planned projects for priority security and implementation of Web services management registry and repository.
 - Data Services, Data Warehousing, Infrastructure Management, and Enterprise Monitoring services are nonexistent.

8.4.6 Business and Technical Value Assessment

The Business Value/Technical Quality (BVTQ) assessment enables a composite view of system capabilities. Rather than make decisions on a “per system” basis, the entire enterprise is evaluated in a holistic manner, grouping investment decisions as shown in [Figure 8-5](#) Matrix of BVTQ. For Business Value, a system is assessed by key stakeholders using the criteria definitions from [Table 8-3](#). For Technical Quality, a system is assessed by designated State technical staff using the criteria definitions from [Table 8-4](#).

The assessment identifies systems that are candidates for either reuse or replacement.

Figure 8-5 Matrix of BVTQ



Table 8-3 Criteria for Business Value System Assessment

BUSINESS VALUE ATTRIBUTES	
Provides functionality to support business needs	The functionality is contained within the application and user does not have to go to multiple systems to perform the business function
High level of automation to support business functions	Perform necessary steps automatically without manual calculations or overrides

Table 8-4 Criteria for Technical Quality System Assessment

TECHNICAL QUALITY ATTRIBUTES	
Loosely coupled and modular	<ul style="list-style-type: none"> • External automated business rules engine and rules in human readable format • SOA architecture • Loosely coupled components, components can be modified independently
Scalable and flexible	<ul style="list-style-type: none"> • Leverages cloud and/or open source • System must be highly scalable, available, reliable, and have SLAs and Key Performance Indicators (KPIs) for measurement • Can scale up for additional programs and initiatives • Able to adapt to changes quickly • Leverages assets within and among States • Leverages public or commercially available off-the-shelf (COTS) software • Can be leveraged for future initiatives
Leverages industry standards	<ul style="list-style-type: none"> • Adheres to National Institution of Standards & Technology (NIST), HIPAA, ADA and other standards specified by CMS • Leverages industry best practices for SDLC • Uses open standards for communication • Allows for data exchange with other agencies
Sustainable	<ul style="list-style-type: none"> • Complexity of solution • Ability to obtain and train Staff in the appropriate technology

The TAS consultants created a survey of 32 different attributes for each system, using criteria aligned with MITA and CMS standards. Survey participants assigned a “1–5” ranking score, to evaluate each targeted system’s alignment with the MITA and CMS standards. The score assigned a value of “1” as the lowest alignment with MITA and CMS standards and “5” as providing the highest level, as compared to industry practices.

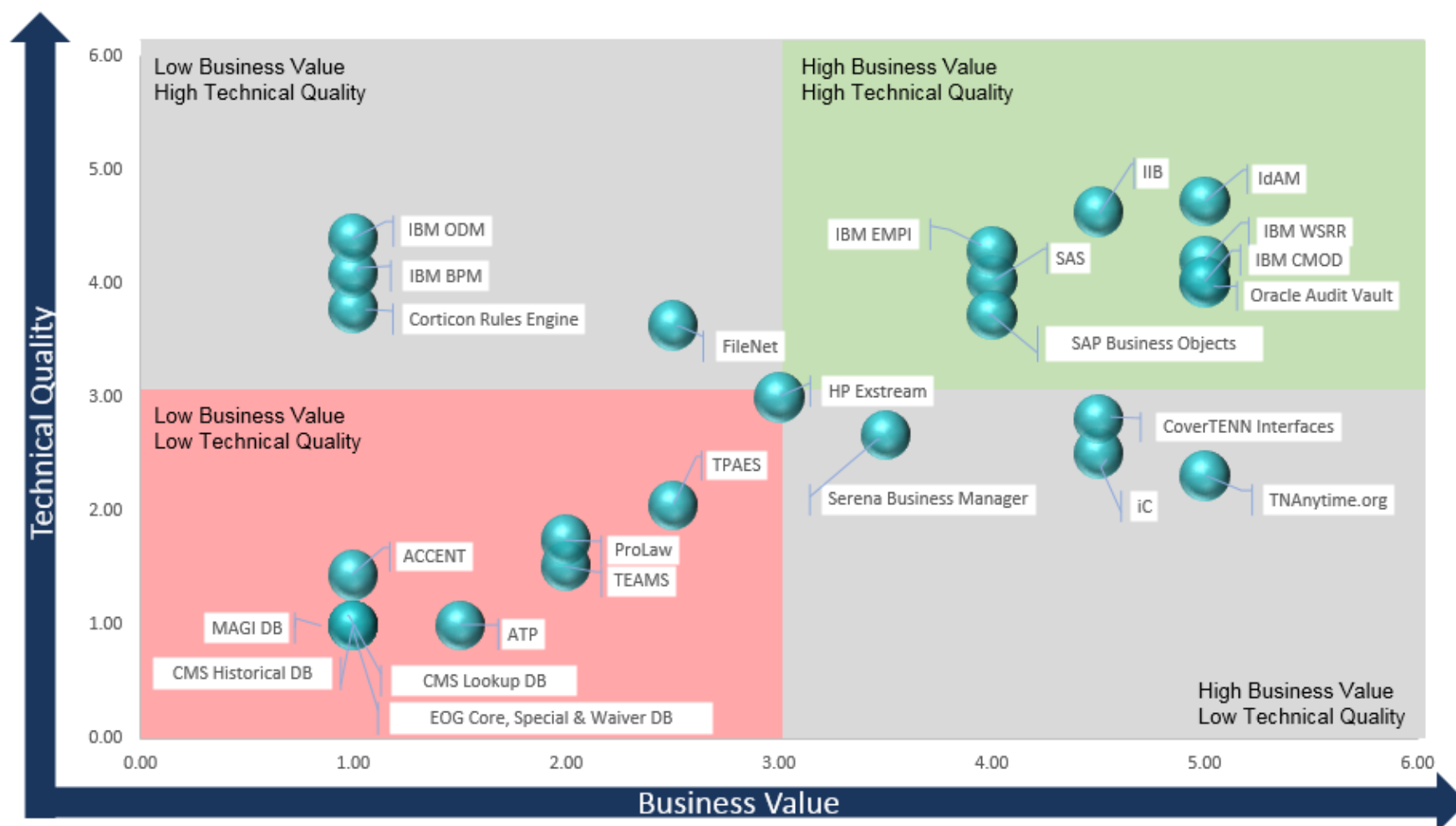
Based on these attributes, every system/ platform was grouped, using survey results from workshop participants. Each candidate system/platform will fall under one of four quadrants on the BVTQ matrix as shown in [Figure 8-5](#):

1. Northwest quadrant: low business value and high technical quality. They are candidates for “enhanced business value.”
2. Northeast quadrant: high business value and high technical quality. They are candidates for “maintain and consolidate.”
3. Southwest quadrant: low business value and low technical quality. They are candidates for “retire or replace.”
4. Southeast quadrant: high business value and low technical quality. They are candidates for “enhanced technical quality.”

These attributes will help inform which systems need to be enhanced, retired, replaced, or maintained. The survey focused on systems that have been identified as impacted (either directly or downstream), based on the program-level and project-level vision. The plotting chart of [Figure 8-6](#) shows the BVTQ analysis for the 26 identified HCFA systems and platforms.

The conclusion from workshop participation was that a small number of assets have the potential for reuse. These are systems have demonstrated high business value and technical quality, and have the potential to support future capabilities. While these systems will be offered to system integrators as potential reuse candidates to meet CMS guidance, the procurement strategy will not mandate any such reuse so as to not limit the potential solutions that contractors may want to propose.

Figure 8-6 Assessment of BVTQ



9 STAKEHOLDERS, NEEDS, BENEFITS, & OUTCOMES

Stakeholders are defined as anyone that has an interest in the solution. This can include regulatory bodies, support organizations, customers, clients, and individuals within the organizations in the scope of the effort. This section identifies the needs and concerns that each stakeholder has which are in-scope to be addressed by the TEDS solution.

9.1 STAKEHOLDERS, NEEDS, BENEFITS & OUTCOMES

9.1.1 Stakeholders

[APPENDIX E:](#) details the TEDS project stakeholders. Analysis identified four groups of stakeholders:

1. Client/Members, including applicants
2. Business Partners, who provide health care services
3. Suppliers, who provide HCFA with data used to verify applicant information
4. Governing Organizations relevant to the regulation of health care financial assistance programs

9.1.2 Stakeholder Current Needs

There are significant challenges that need to be overcome in order to support the State's Medicaid modernization vision and guiding principles. Based on analysis of the technical advisory consultants, the current state has several systemic challenges that can become key drivers for transformation, and the high-priority focus areas for improvement in the future state.

Issues include:

- Consumers need accessibility and process transparency
 - Receipt of unsolicited FFM applications by TNHC results in delayed processing by the FFM, because confused public consumers mail/fax applications for general healthcare financial assistance to TNHC instead of the FFM.
 - TNHC cannot provide immediate assistance to consumers, who need help to resolve inconsistent applications.

- Business partners need improved responsiveness
 - Presumptive eligibility processes require providers to administer a manual process and maintain manual records. The semi-automated methods for transmitting data have a high risk of data integrity issues.
 - Security and privacy service improvements are in-progress, but the macro-level enterprise does not support robust, scalable growth that can protect against escalating threats.
- Governing organizations need improved workflow capability to achieve targeted cycle time and service levels
 - Limited document management capabilities results in abundance of paper-only documentation.
 - Inconsistent policy implementation and lack of automated rules engine results in data integrity issues.
 - Issues related to de-duplication of data because of manual extraction, transformation, and load processes used to transfer data between stand-alone systems.
 - Lack of system integration and system usability (from use of Microsoft Access databases) results in increased work time and effort regarding data housekeeping (non-value-added tasks), instead of member service (value-added casework).
 - Although the SNAP and TANF programs are administered by the DHS and will not be integrated into TEDS, a modular design approach will enable appropriate information sharing for holistic family casework, as well as supporting potential future integrated eligibility platform.
 - The lack of dynamic dashboards, BI, and data analytics restrict management and supervisory operations to making decisions based upon static reports.
 - From an end-to-end perspective, the high number of manual links creates a high risk of potential interruption or delay.

9.1.3 Stakeholder Business Roles

This section defines the roles, based on the business process models. It is important to note that some of the roles will be new to the State and will need to be defined at a more granular level. The roles are shown as horizontal swim lanes on the business process flows, [Section 13](#).

- **Appeals Unit:**

The appeals unit processes all requests for appeals and for continuation of benefits to be extended through the appeals process. This includes all investigation and communication related to resolution and disposition of appeals, including implementation of appeals outcomes.

- **Appellant:**

The person who submits an appeal is an Appellant.

- **Applicant/Member:**

An Individual or Family client accessing any of the application intake channels is an applicant. Members are individuals who are eligible to receive benefits.

- **Authorized Representative:**

An Authorized Representative is an Individual or Organization appointed by the applicant, who is authorized by the applicant to act on their behalf. HCFA may release case information to an authorized representative.

- **Centralized Contact Center/TNHC:**

The State operates an outsourced consumer contact center, marketed as TNHC. The Centralized Contact Center allows for applicants, members, providers, and assistors to contact one central location via phone, fax, or mail. This also is the main entry point for application intake in the absence of a self-service portal. The centralized contact center responds to status requests, queries for program information, and assistance to resolve verification and determination issues.

- **Certified Application Counselor (CAC):**

The CAC is trained in the health care financial assistance application process, guides the consumer to provide accurate and complete application information, and facilitates the data entry of applications.

- **Clerk's Office through TNHC:**

Consumers call TNHC for outstanding issues. The appeals clerk's office does not publish a consumer phone number, but receives calls managed and routed through TNHC. The Clerk's Office manages calls related to the scheduling of the hearing docket.

- **Commissioner's Designee:**

The Commissioner's Designee is a point of escalation in the appeals resolution process.

- **Department of Children's Services (DCS):**

DCS Staff will have access to the TEDS online worker portal, with ability to apply for immediate temporary eligibility for health care benefits, as well as to complete an application on behalf of the individual for longer-term health care benefits.

- **Department of Health:**

The Department of Health staff will have access to the TEDS online worker portal, for the purposes of assisting in the application process for presumptive pregnancy and presumptive breast cancer / cervical cancer benefit programs.

- **External Information Sources:**

This term refers to the broad group of suppliers that provide verification services to the State of Tennessee, or otherwise exchange information regarding enrollment or application status.

- **FFM:**

The FFM will continue to be accessible to consumers as an application channel. Individuals who are assessed by the FFM as "not eligible for Medicaid/CHIP using a MAGI basis" will be considered by the FFM for tax credit financial assistance in the purchase of health care insurance through the federal exchange. Consumers who are assessed by the FFM as potentially eligible for CHIP or Medicaid will have their account transferred to the State for final determination. The FFM will also transfer to the State for final determination of individuals who could be potentially eligible for Medicaid/CHIP on a non-MAGI basis, as well as individuals who need assistance to resolve inconsistent applications. The FFM will perform electronic verification of applicant-attested data. Account transfers will include the applicant's self-attestation and the FFM verification outcomes.

- **Hospital:**

The TEDS partner portal functionality will have the ability to automatically verify whether or not an individual is already a TennCare member. Hospital staff can be designated as an authorized representative to assist a person, who is not currently enrolled in TennCare, in applying for healthcare financial assistance via the online partner portal. Hospital staff can access the TEDS online partner portal to complete a presumptive eligibility application and to complete a full healthcare application, including ability to associate documents (such as emergency medical records) to the application.

- **Member Portal / Member Portal Manager**

The Member portal is an online portal designed for broad consumer access, with use aids to support demographic that is unfamiliar with Web site technology. The Member portal accepts applications to be considered for all programs of health care financial assistance. Consumers who are not eligible for Medicaid/CHIP have their accounts transferred to the FFM, for consideration for potential tax credit assistance with the purchase of health care insurance. The Member portal enables continuing management of an individual's account, including the ability to report changes of circumstances.

- **Member Services:**

Member Services is the broad overall organization responsible for administering eligibility for the State's Medicaid/CHIP program.

- **Members Services – Appeals:**

The Appeals organization is included within Member Services, but it operates independently and impartially to resolve eligibility and access to benefits issues.

- **Nursing Home:**

Nursing Home staff can be designated as an authorized representative to assist a person in applying for healthcare financial assistance via the online partner portal. Nursing Home staff can access the TEDS online partner portal to complete an application for LTSS care, and to report changes of circumstances or needs.

- **OGC:**

OGC is the HCFA Office of General Counsel and provides legal advice to HCFA on all matters, including appeals.

- **SSA:**

The SSA has several stakeholder roles. As a supplier, they provide verification services. As shown in the Intake business process flow, ([Figure 13-2](#)), the SSA performs the intake of applications for SSI, and provides the SSI recipient information to Tennessee.

- **State of Tennessee Member Services EOG:**

The EOG organization is included within Member Services. The EOG provides implementation of all member access channels, optimizing operations to support consumer access and determination of eligibility for healthcare financial assistance.

- **TNHC Worker:**

TNHC workers utilize the Worker Portal in a specific role view appropriate for providing consumer support and entering application information. TNHC workers will have relevant applicant information and status readily available with aids for

controlled/scripted prompts for streamlined resolution of typical customer service inquiries.

- **Worker Portal / Worker Portal Manager**

The worker portal provides HCFA staff and management with an integrated view of information about a member/applicant. It includes a complete case history historical record of the individual member's applications, verifications, eligibility determinations, and benefit aid categories.

10 FUTURE STATE

This section describes the business requirements that the solution must meet. Inputs into the requirements analysis included reference architectures and architecture artifacts developed within a series of workshops to define the current state and future state eligibility-related operations.

The transition to future state will include:

- **Intake** of applications for health care financial assistance, for all benefit programs administered by the State of Tennessee
- Centralized **eligibility determination processes** and data store, independent of any other social welfare programs
- Seamless transfer of eligible persons into **enrollment**,
- Fully automatic MAGI processing, and automated **workflows** for Non-MAGI / LTSS / MSP application processing, inconsistency resolution and appeals processing, including automated scheduling of appeals hearings
- Single source, efficient availability of complete, up-to-date applicant/member information to support **appeals** investigation, and
- Automated processes to trigger routine **case maintenance** events, and
- Management reporting, including dashboard of applicant (and appellant) status and processing cycle time management reporting.

10.1 DESIGN APPROACH

The design approach emphasizes long-term usability through feature integration that supports:

- Modularization, with ability to expand platform to include additional business and program capabilities;
- Configurable, enabling updates through the selection of configuration options and updating of configurable values;
- An eligibility engine that is rules-based;
- Fully automatic MAGI processing, enabling near real-time eligibility determination, with no worker intervention necessary after submission of online application through to viewing the determination notice.
- Deployment of Partner Capabilities, which maximize the abilities of trained hospital, nursing home, and other authorized health care providers to directly enter data into

TEDS. Partnership reduces the data entry burden on State resources, while at the same time enabling an outreach capability, by using partner resources to guide the public consumer in providing accurate application information.

10.2 DESIGN CONSIDERATIONS & DECISIONS

The future state of TEDS will be achieved across a three to five year implementation roadmap. However, the initial release will support the following architecture and design decisions, organized into four groups:

1. Comprehensive and streamlined eligibility capabilities,
2. Interface with other systems,
3. Applicant verification capabilities, and
4. Web-based user portals.

10.2.1 Comprehensive and Streamlined Eligibility Capabilities

1. **TEDS Single Source for Determinations** – All eligibility determinations will flow through TEDS. There will no longer be any “bypass” of the case management system that goes directly to enrollment. In the future state TEDS will be the single repository of all eligibility determination records, including capabilities for both CHIP and Medicaid determinations.
2. **Automated Business Rules Engine** – The design of TEDS will allow the rules hierarchy to be configured/updated separately from the services.
3. **Independent Service Layer** – The services for computing eligibility determinations will be de-coupled from the user interface process layer that collects applicant data for health care financial assistance. This is different from the current FFM application process, which calls services at multiple places in-progress with collecting applicant information. Separating the services allows for running determinations without having to step through the entire user interface application data entry process.
4. **Independent Determinations** – While information will be shared appropriately with other social welfare programs, changing any Medicaid/CHIP member attribute (such as mailing address, income, etc.) will not impact or cause updates to any other social welfare program (such as SNAP/TANF).
5. **Use of FFM Verification Results** – For inbound Account Transfers from FFM, the State will use an automated rules-based “reasonable compatibility” process to determine if

additional verifications are needed or if eligibility can be determined based upon the FFM verification results.

6. **Evergreen Verification** – The redetermination process (for Medicaid and CHIP Redeterminations) will follow an automated rules-based process, such that an individual who has had their citizenship or immigration permanent residency status already verified is not resubmitted for electronic verification (and does not have to resubmit same documents again, to resolve the same prior inconsistency). However, a rules-based automated process will still require reverification during redetermination, for applicants who had submitted temporary immigration statuses.
7. **Real-time Presumptive Eligibility Determinations** – Hospital staff, as well as Department of Health (DOH) staff, can create a presumptive eligibility record (within the TEDS solution), with a rules-defined authorized temporary eligibility period.
8. **Specific Date Authorization/Termination** – The system will not use ‘end of month’ or “beginning of month,” but will have a rules-determined “specific date” (any day of month) for terminating benefits, or for establishing the start date for coverage (receiving benefits for services). TEDS will also have an automatic date/timestamp for authorization of determination date that can be manually backdated by authorized caseworker staff.
9. **Master Person Index (MPI)** – One of the identified TEDS enhancements is to define functionality for member matching or else interface with an existing MPI functionality to match applicants, link members and prevent/eliminate duplications of persons.
10. **Fully Integrated Appeals System** – The case management and applicant/member data functionality necessary to process appeals will be included within TEDS.
11. **Neutral Identity Proofing** – TEDS will not require identity proofing inherent in the application submittal process, for either applicants or nonapplicant household contacts who are submitting applications for another individual (such as a nonapplicant parent for their applicant child). Typical identity proofing processes require more than an SSN check, they also require verification through a credit reporting agency. HCFA policy does not require this level of identity proofing for applicants or for the person who is filing the application on behalf of an applicant (such as a parent for a child). Consistent with HCFA policy, TEDS will request and verify an SSN from all applicants, but will have the capability for applicants to indicate that the applicant has applied for an SSN. In particular, TEDS will not require newborns (children less than 1 year old) to have SSN enumeration in order to submit an application (by an adult on their behalf) or to be determined eligible for benefits in the newborn category. Also consistent with HCFA policy, TEDS application will request SSN from nonapplicants¹⁰ after informing that the SSN will be used only to verify income.

¹⁰ Nonapplicant is defined as a person who is not applying for health coverage, but is on the application as a financial resource for an applicant. Typical examples are a parent applying for a child, or a spouse applying for their spouse.

TEDS will not require nonapplicants to submit an SSN, but the verification process in these situations will not use the automated external data sources.

12. **Eligibility Specialist (State Staff) Medical Evaluation Access** – State staff will have access to information within the TMEDS system, via interface to TEDS, enabling both initial applicant assessment of level of LTSS medical care need, as well as tracking/monitoring for changes in need level.
13. **Ad Hoc Reporting & Data Analytics** – TEDS will support dynamic, flexible reporting, with user-defined parameters, in addition to standard static reports.

10.2.2 Interface with Other Systems

1. **Leverage Existing MMIS** – The MMIS iC is being leveraged as an existing system to continue to store enrollments, and will store both Medicaid and CHIP enrollments.
2. **Single Interface for Shared Enrollment Data** – TEDS will have access to enrollment information within iC MMIS.
3. **Enrollment Verification at iC MMIS – D1H31** Interfaces from FFM (or any other authorized source), which requests verification of CHIP or Medicaid enrollment will exchange verification information from MMIS, because all enrollment data will flow through the MMIS iC.
4. **FFM Account Transfer** – TEDS can perform both inbound to State a “referral for Medicaid/CHIP” from FFM and outbound from State a “referral for APTC consideration” account transfers to FFM, in accordance with CMS’ most recent data transfer agreements.
5. **FFM Verification Records in Account Transfer** – The FFM will perform electronic verification of applicant-attested data, using the Federal Hub. Account transfers will include the applicant’s self-attestation and the verification results from comparison to electronic sources.
6. **Replaced TPAES System** – TEDS will have an ability to exchange medical level eligibility information on a real-time basis with the new system TMEDS, the replacement system of the current TPAES system.
7. **Periodic matching interfaces** – TEDS will have ability to receive and process data sources used for posteligibility monitoring, including but not limited to:
 - a. BENDEX
 - b. BEERS
 - c. PARIS

- d. TN Department of Corrections – Incarceration reporting system
- 8. **Batch SSI interface** – SSA will send a file of SSI recipients to TEDS on a defined routine basis. TEDS will automatically receive and process the SSA’s SDX file.
- 9. **Batch LIS interface** – SSA will send an LIS file to TEDS on a defined routine basis, which will trigger an automated review for MSP eligibility. TEDS will automatically receive and process the SSA’s LIS file.

10.2.3 Applicant Verification Capabilities

- 1. **Primary Verification Source is Electronic** – The new eligibility system will attempt to verify an applicant’s information with electronic sources, as a default for all applicants, in accordance with verification rules. However, subsequent downstream eligibility determination processes are still automated, whether necessary verifications were performed using electronic data or done via manual review of applicant’s documents. Manual verifications do not cause an eligibility determination to have to be manually calculated.
- 2. **Tandem Income Verification Sources** – TEDS will perform income verifications in a rules-based hierarchy, such that if one electronic verification source is down (system unavailable), then alternative electronic verification sources will be used to perform the verification.
- 3. **Federal Hub Applicant Verification** – The new eligibility system will have capability for electronic verifications. The primary source of electronic data for performing verifications of identity, age, citizenship/immigration, and income will be via the Federal Hub integrated verification system, including real-time services from SSA, SAVE, IRS and Equifax Work Number.
- 4. **Federal Hub Redetermination Verification** – The redetermination process (for Medicaid and CHIP Redeterminations) within TEDS will include automatically triggering a real-time information verification request from external information suppliers.
- 5. **Applicant Wages Verification** – The new eligibility system will have capability for electronic verifications of current wages of applicants, including but not limited to these sources:
 - a. State Quarterly Wage Database from State’s Unemployment Insurance data and related state unemployment data sources,
 - b. SWICA, and
 - c. IRS DIFSLA Computer Matching Program.

10.2.4 Web-based User Portals

1. **Initial Worker Focus/No Self-Service Online Portal** – Initial releases of Presentation Layer/User Interface (UI) will focus on caseworker and partner (health provider) worker capabilities. The publicly available self-service portal will be a future enhancement for TEDS.
2. **Worker Portal for Hospital Providers** – Hospital staff have access to the TEDS online partner portal, which enables creating a presumptive eligibility record, as well as entry of applicant data.
3. **Single Interface for Providers** – The solution approach will include capability for Nursing Home/Long-Term Care facility staff to have accessibility to a single device that can enter/retrieve data via the TEDS online member portal.
4. **Providers supply Navigators** – Nursing Home staff (or their authorized associate partners) can assist a facility resident or potential facility resident applicant to initiate and complete an application.
5. **DOH Eligibility System Access** – Department of Health staff will have access to the TEDS online worker portal.
6. **DOH as Trained Users** – Department of Health staff can use the worker portal to create a Non-MAGI method BCC program eligibility record for an individual and can process presumptive eligibility applications for pregnant women.
7. **Authorized Representative Functionality** – Authorized representatives can be managed in a real-time environment, so that new authorized representatives can act immediately to file an application and receive eligibility information regarding an individual.
8. **Worker Portal for DCS** – DCS staff has access to the TEDS online worker portal to initiate and complete an application for a child who is currently in state custody (currently in foster care), including both a presumptive application with temporary eligibility and a full application for standard eligibility.

10.3 FUTURE STATE BUSINESS CAPABILITY MODEL

The KERA reference model of integrated social welfare capabilities provides the context for establishing the scope of the TEDS Future State business capabilities. In [Figure 10-1](#), the selected business capabilities for TEDS are identified in larger **bold** font. Other enterprise-level capabilities are shown in smaller, *italicized* font. The core business capabilities are defined in the business requirements, listed at [Table 12-1](#).

10.4 STRATEGIC REUSE OF EXISTING IT SYSTEMS AND ASSETS

Once the Future State Vision was defined, and automation needs could be identified, it was prudent to identify and evaluate existing assets currently in place to assess their suitability for the Future State. The TAS consultants performed a review of the current IT systems (summarized in [G.1 Application and System Survey Result](#)), which found that the majority of the State's legacy technology is outdated and presents a risk to the State in efficiently and effectively delivering its programs. However, it was also observed that some technology assets can be leveraged in order to reduce technology diversity, licensing cost, and/ or provide more immediate value (such as the IBM FileNet 8 software).

Additionally, the project team also reviewed modernization efforts under way, such as the effort to enhance the State's MMIS, and the establishment of a Health Information Exchange (HIE). There is a potential for reusability of targeted capabilities within these programs, including the MPI, Enterprise Service Bus (ESB), Identity and Access Management (IdAM), and ECM. However, the project team recommends that the State review the reuse of components as they select and procure the larger eligibility and enrollment solutions that will be used for modernization. This review should focus on assessing compatibility of these legacy components with the future solution, while reducing implementation risk and balancing total cost of ownership.

In keeping with the objective to take an incremental approach that reduces risk and to accelerate achievement of a return on investment, it is important to look at reuse of modular-based components across HCFA programs, identify ownership of initial implementation and ongoing services, standardize integration architecture, and define SLAs. Additionally, the implementation timeline of in-progress capabilities needs to be carefully monitored to ensure alignment.

Options for reuse include:

- **Reuse existing solutions** – If the existing solution works well, the new eligibility solution can simply extend and reuse existing solutions (potentially as shared services).
- **Reuse the software** – If HCFA owns enterprise licenses, the new SI can be required to incorporate the software tool in their solutions, while also being allowed to implement new instances.
- **Encourage but not mandate** – Encourage the SI to leverage existing software licenses, which would reduce cost and technology diversity, but remain open for the SI to propose new solutions.

The State's Strategic Technology Services (STS) operates data centers for all State agencies, including hosting and all infrastructure maintenance. TEDS is expected to be hosted in STS facilities and comply with STS processes and standards for provision, disaster recovery and change management.

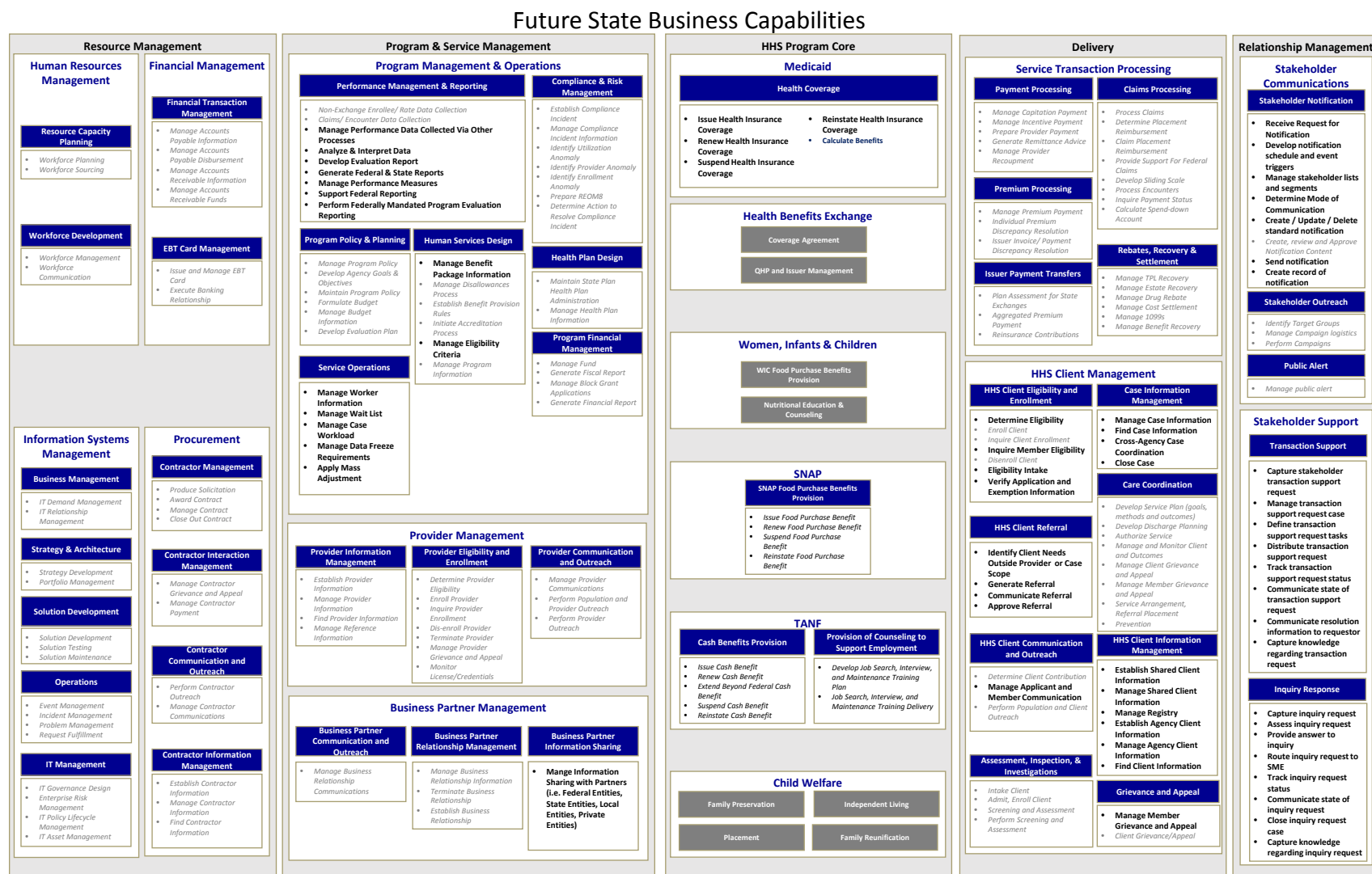
10.4.1 Future State Capabilities for Appeals Operations Group

Workshop participation identified the need for the Appeals Unit to have business capabilities fully integrated within the new eligibility determination system. The sequence order is as collected from the workshop inputs (no inference of priority or impact). Each specific Tennessee HCFA business capability is decomposed from (and is traceable to) the KERA top-level business capabilities, as listed in the last column.

Table 10-1 Appeals Unit-Specific Business Capabilities

#	REQUIREMENT DESCRIPTION	BUSINESS CAPABILITY NAME (CROSS-REFERENCE WITH KERA)
1	Appeals Unit shall have the ability to view appeals case information.	Manage Applicant and Member Information Manage Case Information Assess Inquiry Request
2	Appeals Unit shall have the ability to link appeals to cases.	Manage Case Information
3	Appeals Unit shall have the ability to add case notes within the new TEDS.	Manage Case Information
4	Appeals Unit shall have the ability for a historical view of all of an individual's cases and appeals.	Manage Case Information
5	Appeals Unit shall have the ability to intake appeals via United States Postal Service (USPS) Mail/Fax/Phone.	Capture Inquiry Request
6	Appeals Unit Workflow shall include prompts for the caseworker, such as identifying mandatory criteria and required timeliness.	Assess Inquiry Request Provide Answer to Inquiry
7	Appeals Unit Workflow shall include an automated business rules engine, checklist prompts, and keyed references to support the caseworker's ability to apply policies in an appropriate hierarchy and to obtain the information necessary for accurate appeals processing.	Assess Inquiry Request Provide Answer to Inquiry

Figure 10-1 Model of Future State Business Capabilities



10.4.2 Future State Capabilities for Intake Channel

The Future State – Intake Processes workshop was conducted to identify desired future intake channels for delivery of Medicaid and CHIP services. The goal is to reach a future state that aligns with guiding principles of consistent delivery of member services, optimized business operations using reliable systems, self-sufficiency, data quality and integrity, and organizational adaptability.

Given that the state already processes applications via paper, mail, and fax, modernization could provide enhancements to these existing pathways for individuals to apply for benefits. Additional channels as a result of modernization could also include:

- Self-service portal
- Mobile Access (smartphone and tablet portal compatibility applications)
- Case worker portal
- Partner portal, similar to caseworker portal, but with an access view and role privileges that are appropriate for authorized health care providers.
- Enhancing the service center with an automated interactive voice response system (IVR).

These options are intended to provide cost-effective and member-centered self-service and result in increased member satisfaction and worker efficiency. Emphasizing increased ability for members, applicants, and partners to self-serve directly supports many aspects of HCFA’s vision for the future of eligibility modernization, including consistent delivery of services, optimized business operations, and improved data integrity.

Workshops participants used a variant on the technique of “MoSCoW” analysis. This technique reviews each of the future state intake channel improvements and assigns a priority, as defined in [Table 10-2](#).

Table 10-2 MoSCoW Prioritization Criteria

MUST HAVE	<p>Channel is mandated by Federal/State guidance.</p> <p>Channel capability aligns with guiding principles and is critical to modernized business operations.</p> <ul style="list-style-type: none"> • SI must enable or develop the functionality for automating the process or activity.
------------------	---

SHOULD HAVE	<p>Channel capability aligns with guiding principles and will enhance business operations</p> <ul style="list-style-type: none"> The systems integrator should enable or develop the functionality, given that the effort and costs are reasonable.
COULD HAVE	<p>Channel capability aligns with guiding principles, but is not critical to modernized business operations</p> <ul style="list-style-type: none"> If the solution provides this functionality out-of-the-box, or the functionality can be easily developed, it should be enabled or developed.
NOT APPLICABLE	<p>Channel capability is not needed for business operations</p> <ul style="list-style-type: none"> Is currently a manual process that does not require any automation

[Table 10-3](#) lists the Intake channels identified for consideration in the future state.

Table 10-3 Intake Channels for Future State

MAIL	Applications, notices, and applicable correspondence sent and received via U.S. Mail
IN PERSON	Member or applicant interacts on site at Medicaid office, or via CACs at Department of Human Service's offices.
FAX	<p>Applications and applicable correspondence received via fax.</p> <p><i>Note: that fax capability is not a federal CMS requirement. It is an operational choice of the State.</i></p>
MEMBER PORTAL	Online Web portal designed for member/applicant access with unique logon credentials
PARTNER PORTAL	Online Web portal designed for partner access with unique logon credentials
WORKER PORTAL	Online Web portal designed for worker access with unique logon credentials
CENTRALIZED CONTACT CENTER	Channel where phone inquiries, IVR correspondence, and phone applications are processed.

MOBILE	<p>Online channel designed for mobile devices using mobile application or Web page.</p> <p><i>Note: With regard to mobile ability and appeals, the applicant would only be able to use the mobile interface to schedule an appeal hearing, not to file the appeal itself.</i></p>
---------------	---

10.4.3 Intake Channel Prioritization Results

Prioritization provides a mechanism for ordering the process and activities that will be elaborated into system use cases. Each channel was evaluated as an improvement opportunity.

Enabling Member Services channels with a modernized Worker Portal and Partner Portal is the highest priority, because it supports all mail, fax, phone, and in-person channels. The in-person channel includes CACs at DHS offices and application assistance that is provided at hospital partners.

All intake channels will benefit from the improved data access to support each stage of the application, including change of circumstance, and redetermination processes. By enabling the worker portal capability first, the State anticipates a number of key benefits:

- Faster processing time for workers to access and review application information speeds the determination process
- Consolidated window to access data and electronic document attachments
- Consistent, accurate data instead of each case worker reading a hand-written paper application
- Timely basis for decisions and management of workflow, instead of logging and tracking manual paper application stacks.

The Member Self-Service Portal is the industry standard. SIs with experience in Medicaid Modernization typically propose this capability in their solution portfolio. However, creating and maintaining a public access portal requires significant content management and extensive testing to assure ease of use with the target population demographic. Moreover, because applicants already enjoy the benefit of an online portal for MAGI applications (via the FFM), this member facing capability is considered less critical than the worker portal described above. The following benefits were identified by workshop participants:

- Automated and integrated MAGI and non-MAGI application process:
 - MAGI-eligibility information is collected initially in TN
 - Within the same session, in response to applicant selections, the data needed for a non-MAGI eligibility determination can be collected with the initial application

- Reduces cycle time to complete eligibility determination
- Improves applicant experience
- Reduces data error rates from incorrect or omitted manual data entry
- Allows for electronic document attachments
- Enables ability to process applications at HCFA first rather than primarily receiving general healthcare applications from the FFM, while still allowing for account transfer to FFM for applications that are not Medicaid or CHIP eligible
- Real-time connection with State-level databases to enable verifications from State data (such as income from State unemployment tax databases)

In-person, mail, and phone are mandated application channels and as such are “must have” capabilities for most applicable interactions. An enhanced centralized contact center would automate and improve processes for phone interactions. The following benefits could be realized from an enhanced centralized contact center:

- IVR capabilities will reduce the need to speak to a person for simple information or transactions to help minimize call wait times and phone staff workload, and implement call-back capability to reduce hold times.
- Surge staffing could accommodate peak demand during the FFM Open Enrollment period
- Enhanced data enables understanding customer application changes/updates from prior application, as well as inconsistency status
- Opportunity to centralize more business processes into a single contact center

Mobile applications are not mandated. This channel is classified as a “could have” for most interactions. It provides the following benefits:

- Mobile applications will allow access to eligibility and enrollment functionality and notifications via various tools (smart phone, tablet, etc.).
- Leverage capabilities such as cameras to take and upload images of documents
- Mobile devices have become widespread, especially with the low-income population. With the adoption of a mobile access intake channel, the State can reach individuals who otherwise may not have participated.
- Mobile apps enable portable resources for outreach social workers/CACs to easily access and serve vulnerable populations in their own homes or at outreach events.

[Table 10-4](#) includes the detail of the prioritization results.

For [Table 10-4](#), activities marked “M” indicate a “Must Have,” whereas “C” is a “Could Have” and “N” is “Not Applicable.”

Table 10-4 MoSCoW Prioritization of Future State Intake Channels

MUST HAVE (M) – COULD HAVE (C) – NOT APPLICABLE (N)		CHANNEL							
EXTERNAL STAKEHOLDER	EXTERNAL INTERACTION – INTAKE	MAIL	IN PERSON	FAX	MEMBER PORTAL	PARTNER PORTAL	WORKER PORTAL	CENTRALIZED CONTACT CENTER	MOBILE
Applicant	Application Intake	M	M	M	M	N	N	M	C
Applicant	Authorized Rep Assignment	M	M	M	M	N	N	M	C
Applicant	Appeal Request	M	N	M	N	N	N	M	N
Applicant	Appeal Hearing Scheduling (Notice)	M	N	N	C	N	N	C	N
Applicant	Provide Verification Evidence	M	M	M	M	N	N	N	C
Applicant	Notice	M	N	N	M	N	N	M	C
Authorized Rep – Applicant	Application Intake	M	M	M	M	N	N	M	C
Authorized Rep – Applicant	Appeal Request	M	N	M	N	N	N	M	N
Authorized Rep – Applicant	Appeal Hearing Scheduling (Notice)	M	N	N	C	N	N	C	N
Authorized Rep – Applicant	Provide Verification Evidence	M	M	M	M	N	N	N	C
Authorized Rep – Applicant	Notice	M	N	N	M	N	N	M	C
Member	Application Intake	M	M	M	M	N	N	M	C
Member	Authorized Rep Assignment	M	M	M	M	N	N	M	C
Member	Appeal Request	M	N	M	N	N	N	M	N
Member	Appeal Hearing Scheduling (Notice)	M	N	N	C	N	N	C	N
Member	Provide Verification Evidence	M	M	M	M	N	N	N	C
Member	Notice	M	N	N	M	N	N	M	C
Member	Change of Circumstance	M	M	M	M	N	N	M	C
Member	Inquiry, Complaint, Grievance	M	N	M	M	N	N	M	C
Member	Redetermination	M	M	M	M	N	N	M	C

MUST HAVE (M) – COULD HAVE (C) – NOT APPLICABLE (N)		CHANNEL							
EXTERNAL STAKEHOLDER	EXTERNAL INTERACTION – INTAKE	MAIL	IN PERSON	FAX	MEMBER PORTAL	PARTNER PORTAL	WORKER PORTAL	CENTRALIZED CONTACT CENTER	MOBILE
Authorized Rep – Member	Application Intake	M	M	M	M	N	N	M	C
Authorized Rep – Member	Appeal Request	M	N	M	N	N	N	M	N
Authorized Rep – Member	Appeal Hearing Scheduling (Notice)	M	N	N	C	N	N	C	N
Authorized Rep – Member	Provide Verification Evidence	M	M	M	M	N	N	N	C
Authorized Rep – Member	Notice	M	N	N	M	N	N	M	C
Authorized Rep – Member	Change of Circumstance	M	M	M	M	N	N	M	C
Authorized Rep – Member	Redetermination	M	M	M	M	N	N	M	C
Nursing Facility (LTSS)	Change of Circumstance	M	N	M	N	C	N	M	N
Nursing Facility (LTSS)	Application Referral	M	N	M	M	C	N	N	C
Hospital (Presumptive/EMS)	Application Referral	N	N	M	N	M	N	N	N
Department of Intellectual & Developmental Disabilities (DIDD) (LTSS)	Application Referral	M	N	M	M	C	N	N	C
Department of Health (Presumptive / BCC)	Application Referral	N	N	M	N	N	M	N	N
Area Agency on Aging and Disability (AAAD) (LTSS)	Application Referral	M	N	M	M	C	N	N	C
MCO	Application and Verification Facilitation	N	N	C	N	C	N	N	N
DCS (Foster Care)	Eligibility Determination (via ACCENT)	N	N	N	N	N	M	N	N
DHS (CAC)	Application Assistance	N	M	N	M	N	N	N	N
Revenue Cycle Manager	Application Assistance	N	N	C	N	C	N	N	N

11 SCENARIOS – FUTURE OPERATING MODELS BY ELIGIBILITY PROGRAM

An over-arching vision of the guiding principles is to assure that improvement benefits are realized through end-to-end implementation. This assures that an improvement in one part of the process is not overwhelmed by a breakdown elsewhere in the chain of tasks to realize an eligibility determination for the target group. The strategic goal is to assure streamlining across the entire value stream.

[Figure 11-1](#) through [Figure 11-17](#) model the scenario flows for each type of eligibility program. Sections [11.1](#) through [11.17](#) summarize the preconditions and post conditions for each process.

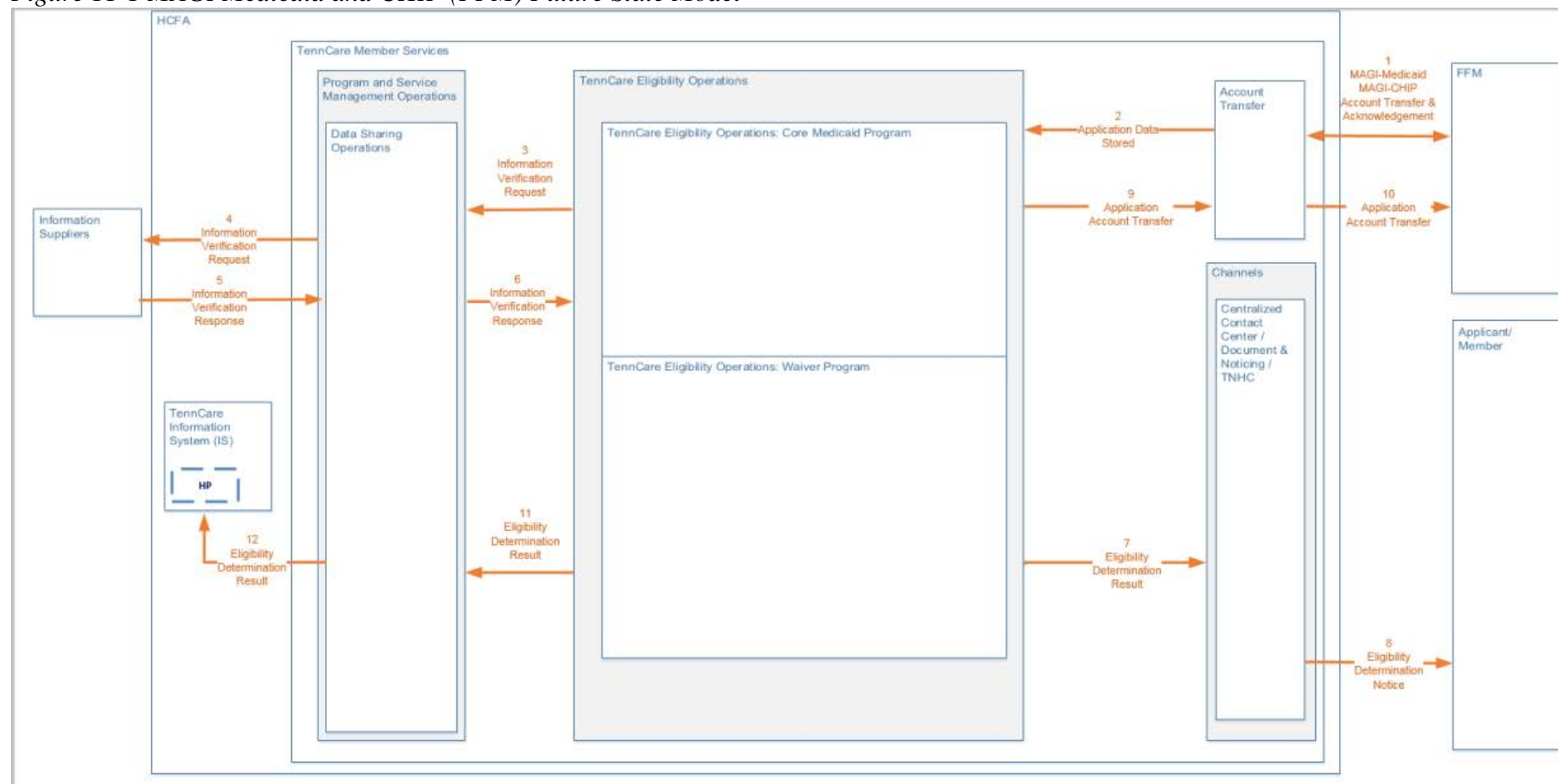
This section is organized in order by most frequent/highest impact to member services, in terms of the number of applicants/members that will be affected by the future state changes.

[Table 12-1](#) Business Requirements and Core Capabilities Summary are a summary of all the scenarios, listed as top-level business capability requirements, organized by program. This list was created by modeling the process for each specific eligibility program, following the sequence defined by the HCFA business stakeholders during workshop participation. Each of the requirements is also cross-referenced to the KERA model capabilities. [APPENDIX D:](#) includes additional information regarding the KERA model.

11.1 MAGI MEDICAID AND CHIP (VIA FFM)

As shown in [Figure 11-1](#), an applicant shall be able to submit an application for health care financial assistance at the FFM. Once FFM transfers the application to Tennessee, Tennessee shall use a rules-based system to determine if additional verifications are necessary. TEDS shall notify the applicant of the eligibility determination result based on the information verified from external sources.

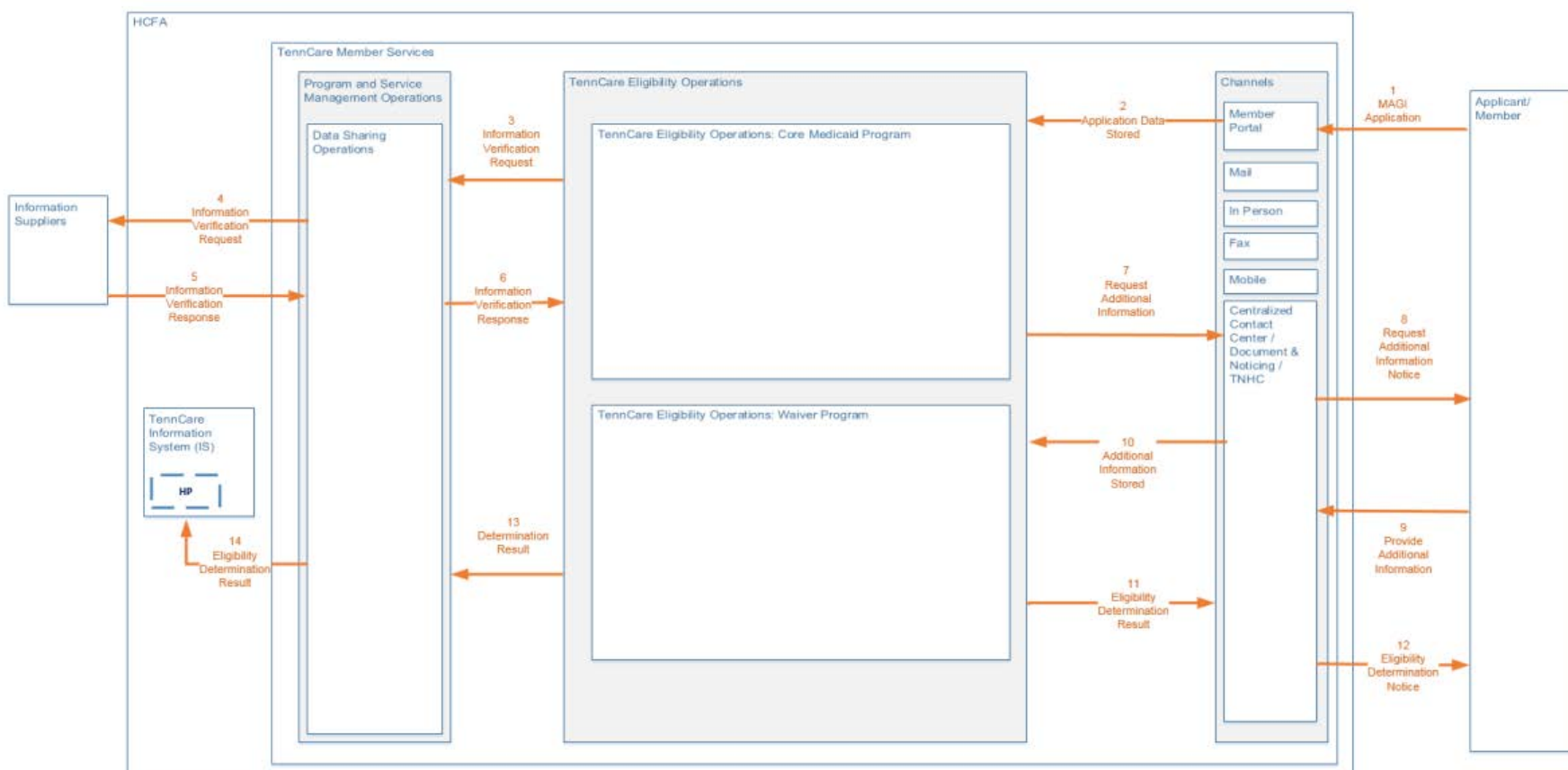
Figure 11-1 MAGI Medicaid and CHIP (FFM) Future State Model



11.2 MAGI MEDICAID AND CHIP (VIA SELF-SERVICE PORTAL DIRECT TO TENNESSEE)

As shown in [Figure 11-2](#), a person who is not currently enrolled in TennCare shall be able to submit an application for benefits directly to the State through the online member portal any supported channel as described in [Section 10.4.2](#). TEDS shall notify the applicant of the eligibility determination result based on the information verified from external sources.

Figure 11-2 MAGI Medicaid and CHIP (via Self-Service Portal) Future State Model



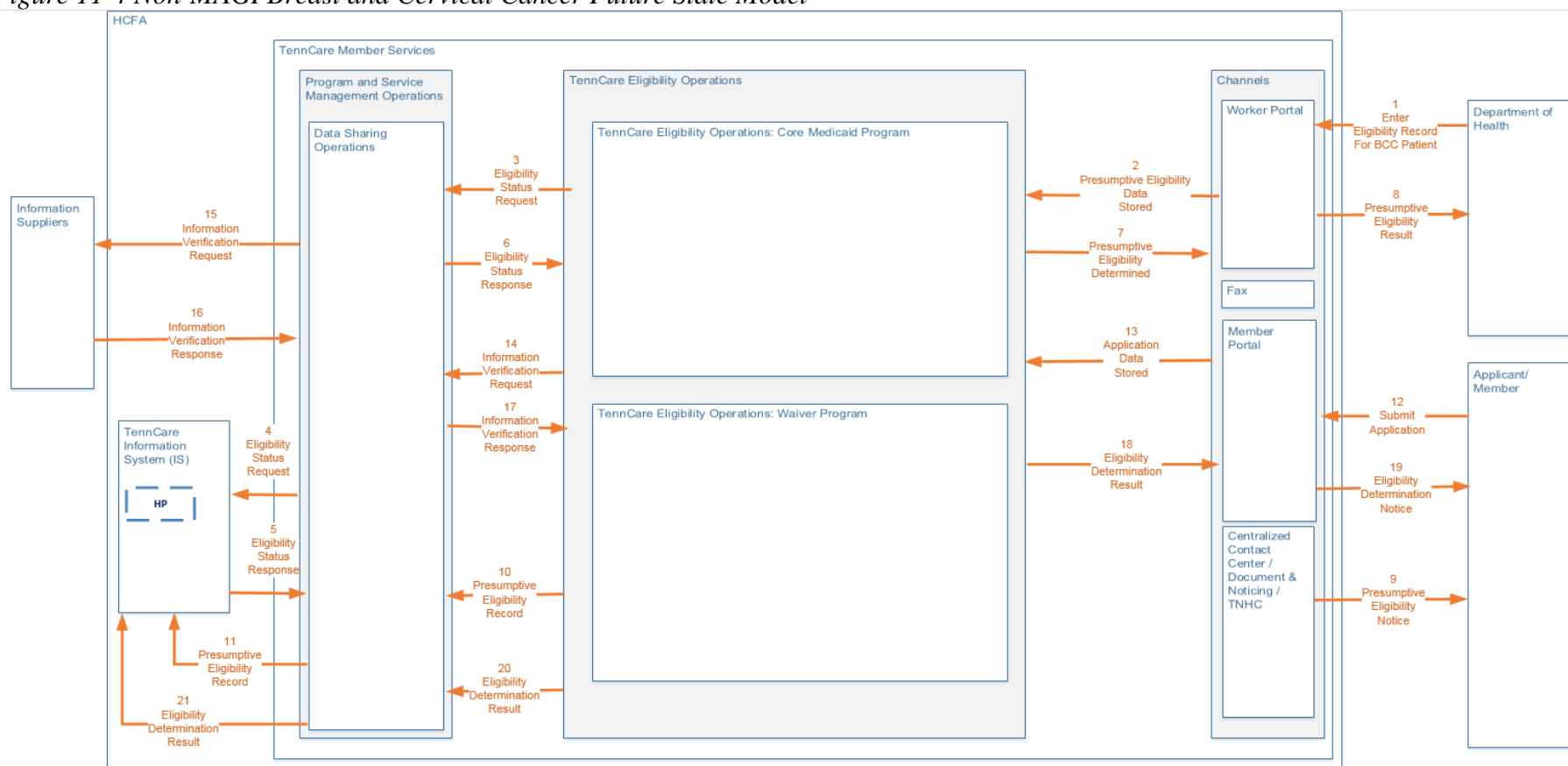
As shown in [Figure 11-3](#), nursing home staffers can assist a resident (or potential resident), who is not currently enrolled in TennCare, with Non-MAGI LTSS application through the TEDS member portal. TEDS shall have access to TMEDS. TEDS shall be able to notify the applicant of the eligibility determination result based on TMEDS medical information and applicant information verified from external sources and/or a review of applicant submitted documents.

The flowchart illustrates the TennCare Eligibility Operations process, which involves multiple stakeholders and systems. The process begins with a 'Submit Application' (1) from a 'Nursing Home/Advocacy Group/Ombudsman' to the 'Member Portal'. The application data is then stored (2) and processed by the 'TennCare Eligibility Operations: Core Medicaid Program'. This leads to an 'Information Verification Request' (3) to 'Data Sharing Operations', which then sends an 'Information Verification Response' (5) to 'Information Suppliers'. The process continues with a 'Check / Update Level of Care Request' (14) to the 'Tennessee Pre-Admission Evaluation System (TPAES)', which responds with a 'Check / Update Level of Care Response' (15) back to 'Data Sharing Operations'. Simultaneously, a 'Check / Update Level of Care Request' (13) is sent to the 'TennCare Eligibility Operations: Waiver Program', which responds with a 'Check / Update Level of Care Response' (16) back to 'Data Sharing Operations'. 'Data Sharing Operations' then sends an 'Eligibility Determination Result' (20) to the 'TennCare Information System (IS)', which provides an 'Eligibility Determination Result' (21) to the 'HP' (Health Plan) and another 'Eligibility Determination Result' (22) to 'TPAES'. The process also includes a 'Request Additional Information' (8) from the 'Nursing Home/Advocacy Group/Ombudsman' to the 'Member Portal', which leads to an 'Eligibility Determination Notice' (19) to the 'Applicant/Member'. Additionally, a 'Request Additional Information' (10) is sent to the 'Applicant/Member', which leads to a 'Provide Additional Information' (9) to the 'Centralized Contact Center / Document & Noticing / TNHC'. The 'Centralized Contact Center / Document & Noticing / TNHC' also sends a 'Request Additional Information' (11) to the 'Applicant/Member' and an 'Eligibility Determination Notice' (18) to the 'Applicant/Member'. The process also includes a 'Request Additional Information' (7) from the 'TennCare Eligibility Operations: Core Medicaid Program' to the 'Centralized Contact Center / Document & Noticing / TNHC', which stores the 'Additional Information' (12) and sends an 'Eligibility Determination Result' (17) back to the 'TennCare Eligibility Operations: Core Medicaid Program'. The process also includes a 'Request Additional Information' (8) from the 'Nursing Home/Advocacy Group/Ombudsman' to the 'Member Portal', which leads to an 'Eligibility Determination Notice' (19) to the 'Applicant/Member'. Additionally, a 'Request Additional Information' (10) is sent to the 'Applicant/Member', which leads to a 'Provide Additional Information' (9) to the 'Centralized Contact Center / Document & Noticing / TNHC'. The 'Centralized Contact Center / Document & Noticing / TNHC' also sends a 'Request Additional Information' (11) to the 'Applicant/Member' and an 'Eligibility Determination Notice' (18) to the 'Applicant/Member'. The process also includes a 'Request Additional Information' (7) from the 'TennCare Eligibility Operations: Core Medicaid Program' to the 'Centralized Contact Center / Document & Noticing / TNHC', which stores the 'Additional Information' (12) and sends an 'Eligibility Determination Result' (17) back to the 'TennCare Eligibility Operations: Core Medicaid Program'.

11.4 NON-MAGI BCC AND PREGNANCY PRESUMPTIVE ELIGIBILITY

As shown in [Figure 11-4](#), Department of Health staff shall have access to the TEDS online worker portal. Department of Health staff can create a Non-MAGI BCC (or pregnancy) temporary presumptive eligibility record for an individual. TEDS shall verify the information from external sources and notify the Department of Health and the applicant of eligibility determination result. The future state shall allow the respective individual to submit an application through the TEDS online member portal at a later point in time, or through the phone or paper application mail/fax intake channels.

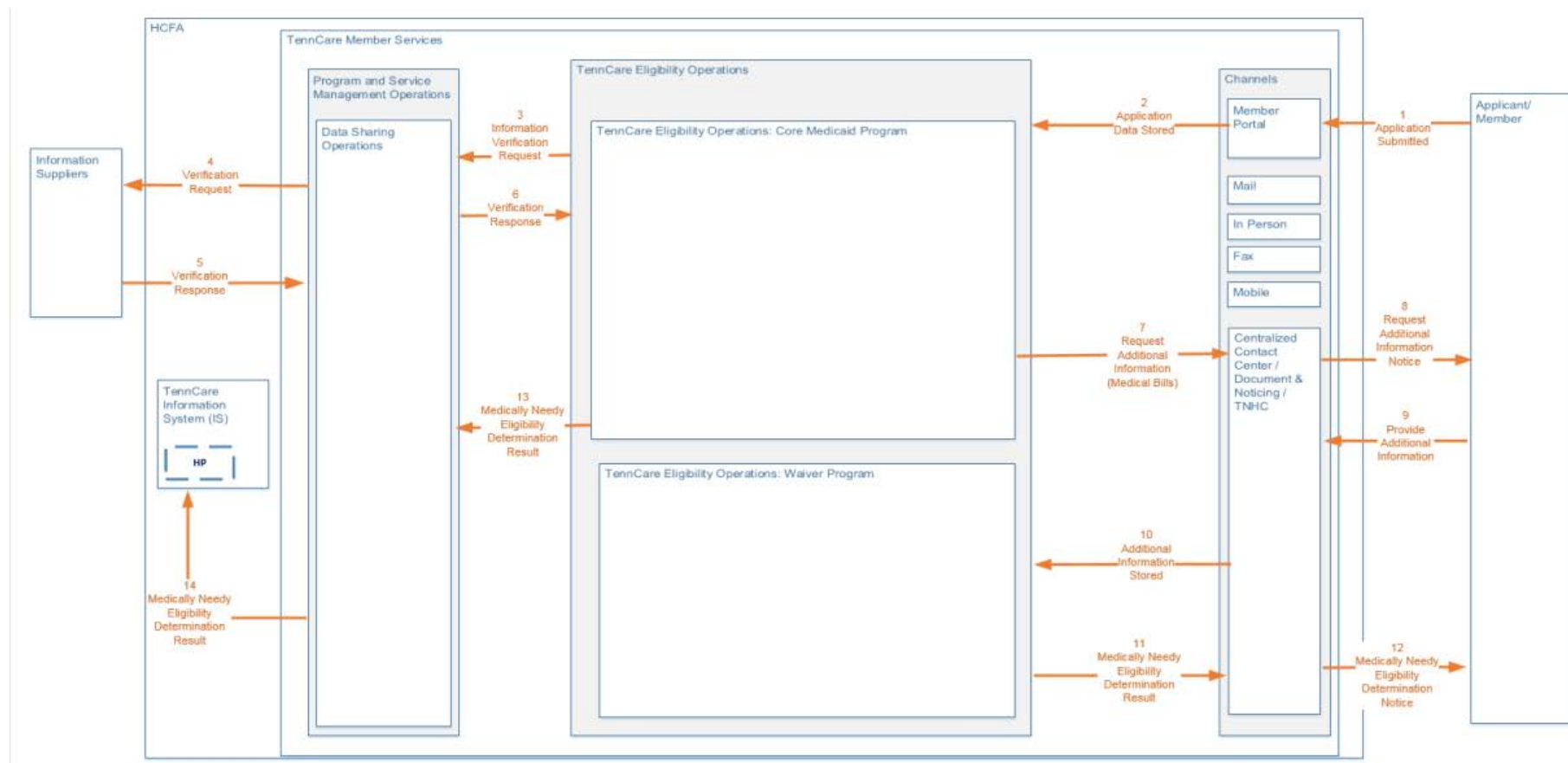
Figure 11-4 Non-MAGI Breast and Cervical Cancer Future State Model



11.5 NON-MAGI MEDICALLY NEEDED

As shown in [Figure 11-5](#), anyone under the Non-MAGI category attempting to qualify for Medicaid eligibility shall be able to submit an application directly to the State through the online member portal. TEDS shall notify the applicant of medically needy eligibility based on the information verified from the external sources and/or a review of applicant submitted documents.

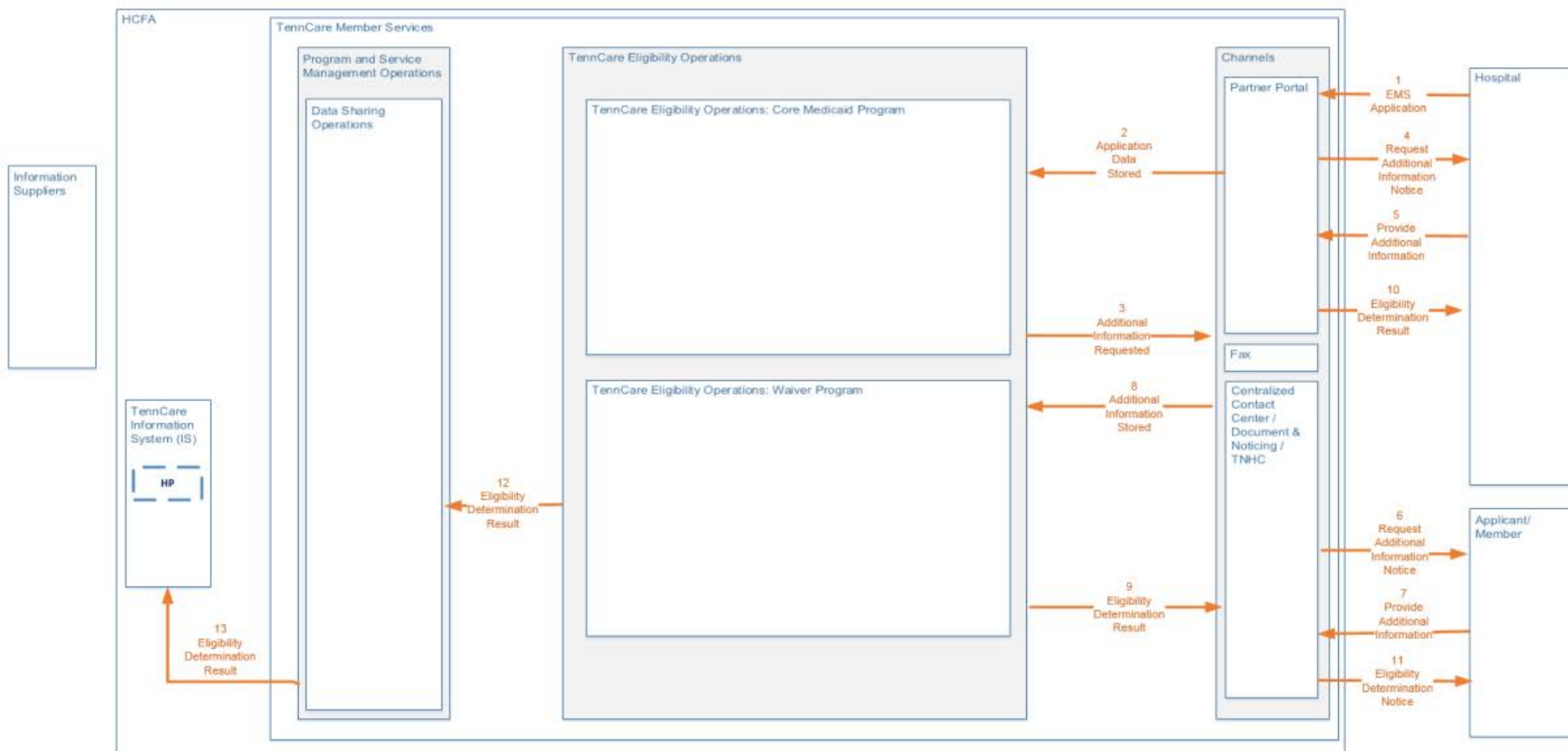
Figure 11-5 Non-MAGI Medically Needy Future State Model



11.6 EMERGENCY MEDICAL SERVICES

As shown in [Figure 11-6](#), appropriate hospital staff can assist a person, who is not currently enrolled in TennCare, in applying for medical services via the online partner portal. In this emergency scenario, the non-medical information of the applicant is processed without verification from external sources. However, eligibility determination includes a review of applicant medical records.

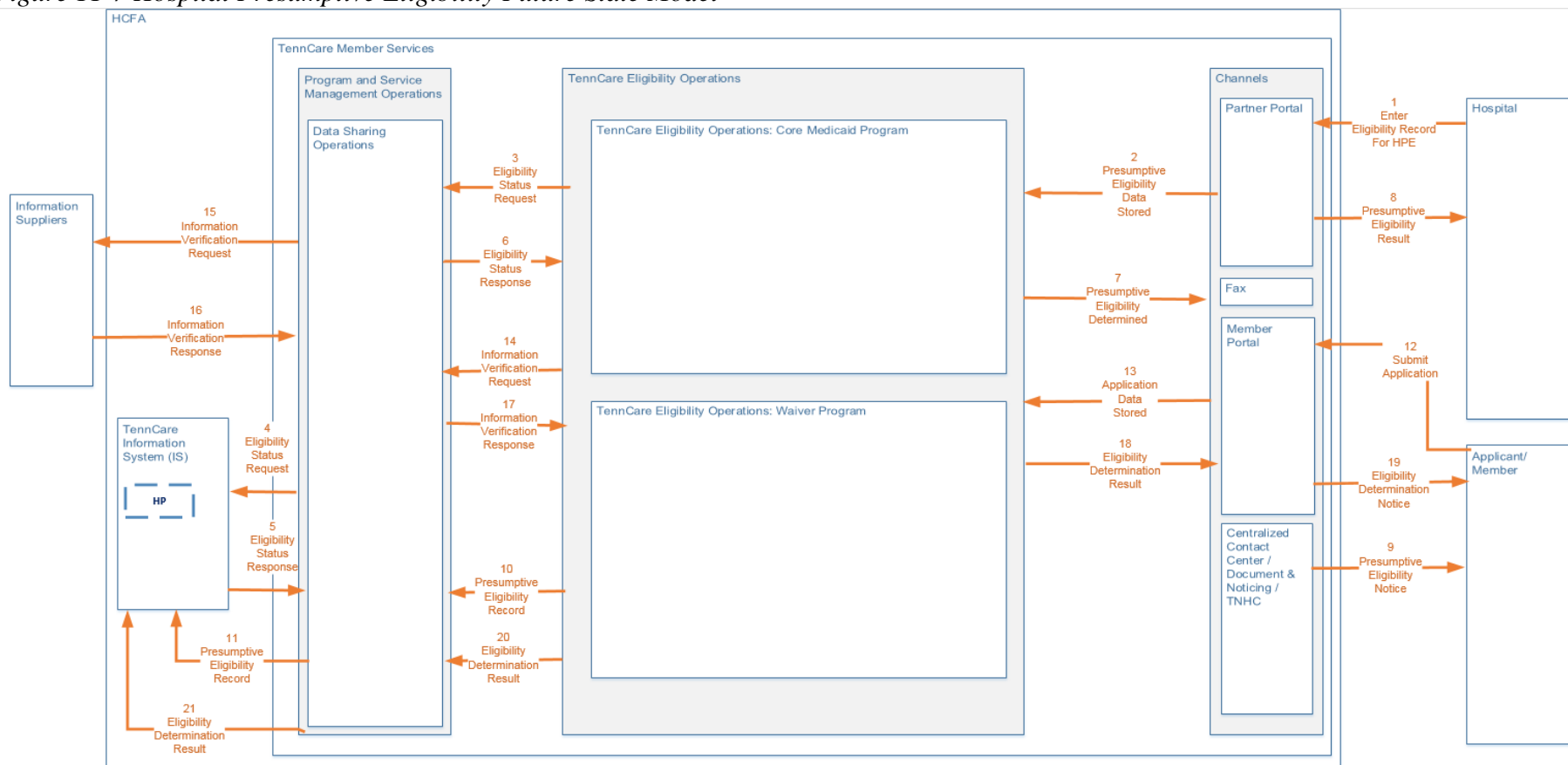
Figure 11-6 EMS Future State Model



11.7 HOSPITAL PRESUMPTIVE ELIGIBILITY

As shown in [Figure 11-7](#), Hospital staff can access TEDS online partner portal to create a presumptive eligibility record for an applicant who is currently not enrolled in TennCare or CHIP. TEDS shall verify the information from external sources and notify the hospital and the applicant of eligibility determination result. The future state shall allow the applicant to submit an application through the TEDS online member portal at a later point in time.

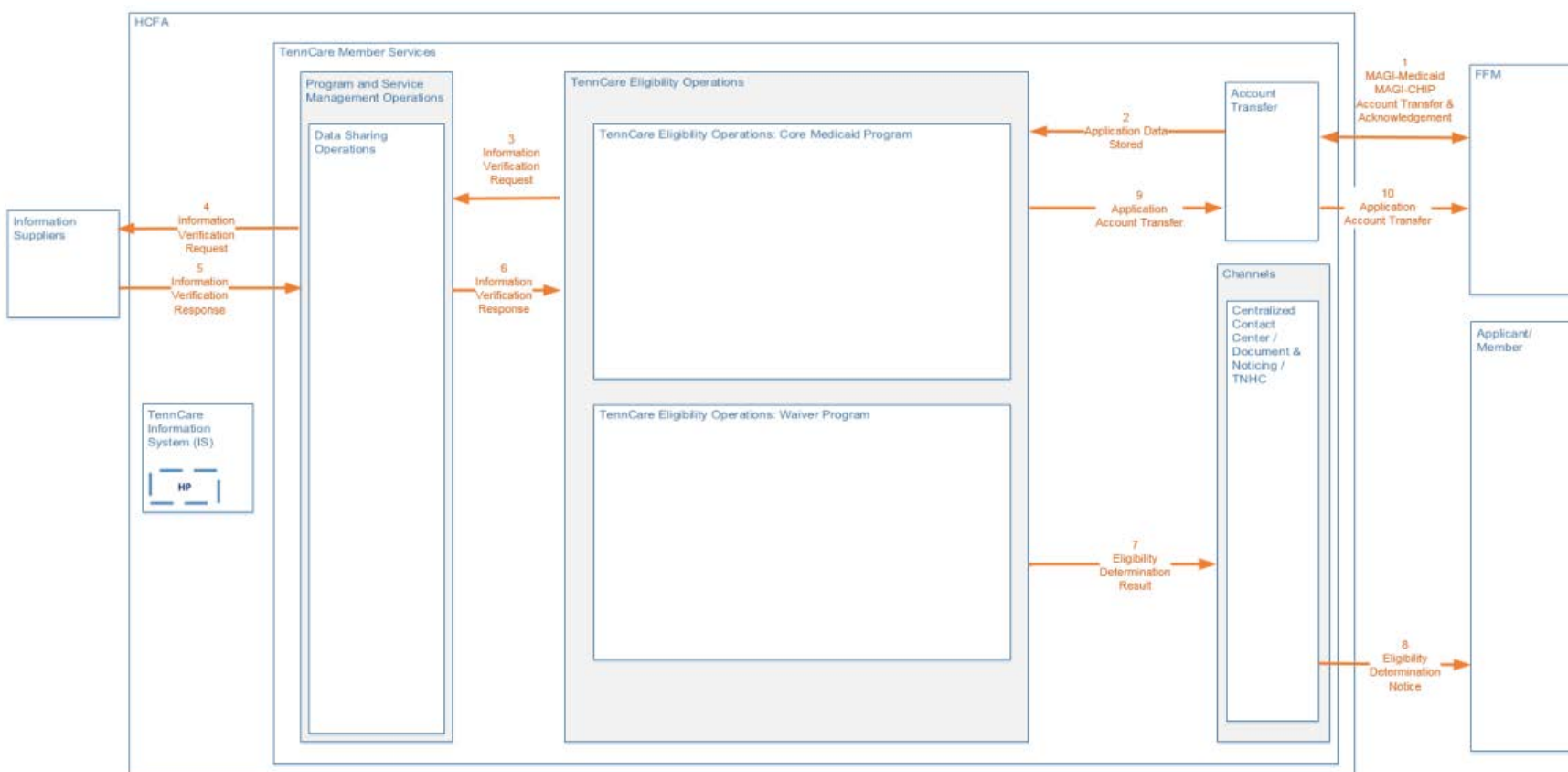
Figure 11-7 Hospital Presumptive Eligibility Future State Model



11.8 DENIAL CASE – MAGI MEDICAID & CHIP (VIA FFM)

As shown in [Figure 11-8](#), an applicant shall be able to submit an application for benefits at the FFM. Once FFM transfers the application to Tennessee, Tennessee shall verify the information from external sources for the MAGI-CHIP and MAGI-Medicaid eligibility and notify the applicant of the eligibility determination result. TEDS shall forward all applicants who are denied eligibility for both Medicaid and CHIP to the FFM as outbound account transfers from HCFA.

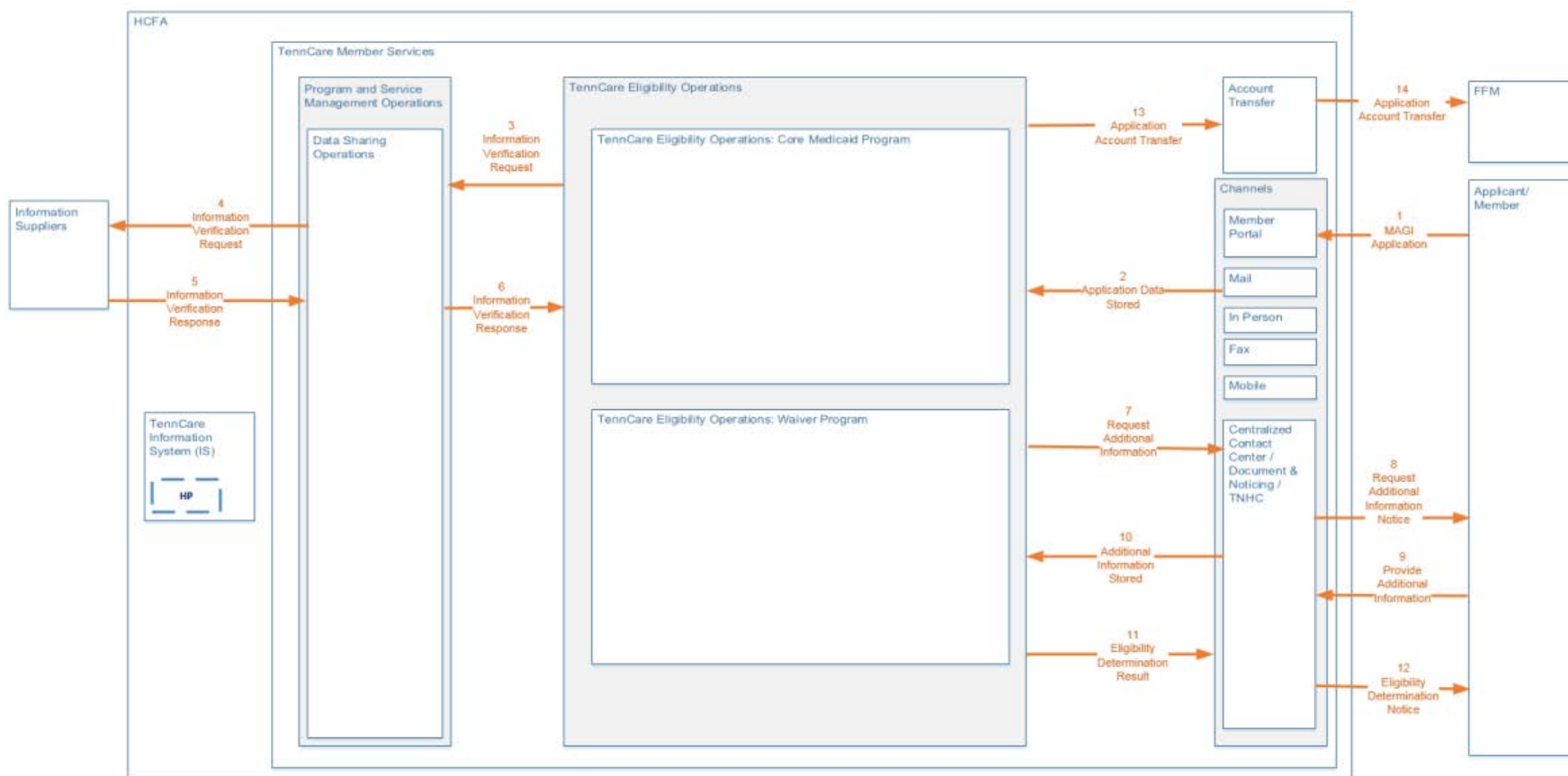
Figure 11-8 Denial for MAGI Medicaid and CHIP (via FFM) Future State Model



11.9 DENIAL CASE – MAGI MEDICAID & CHIP (VIA SELF-SERVICE PORTAL)

As shown in [Figure 11-9](#), a person who is not currently enrolled in TennCare shall be able to submit an application for benefits directly to the State through the online member portal. TEDS shall verify applicant information with external sources, calculate a determination for MAGI-CHIP or MAGI-Medicaid and shall notify the applicant of the ineligibility determination result. TEDS shall forward all applicants who are denied eligibility for both Medicaid and CHIP to the FFM as outbound account transfers from the State.

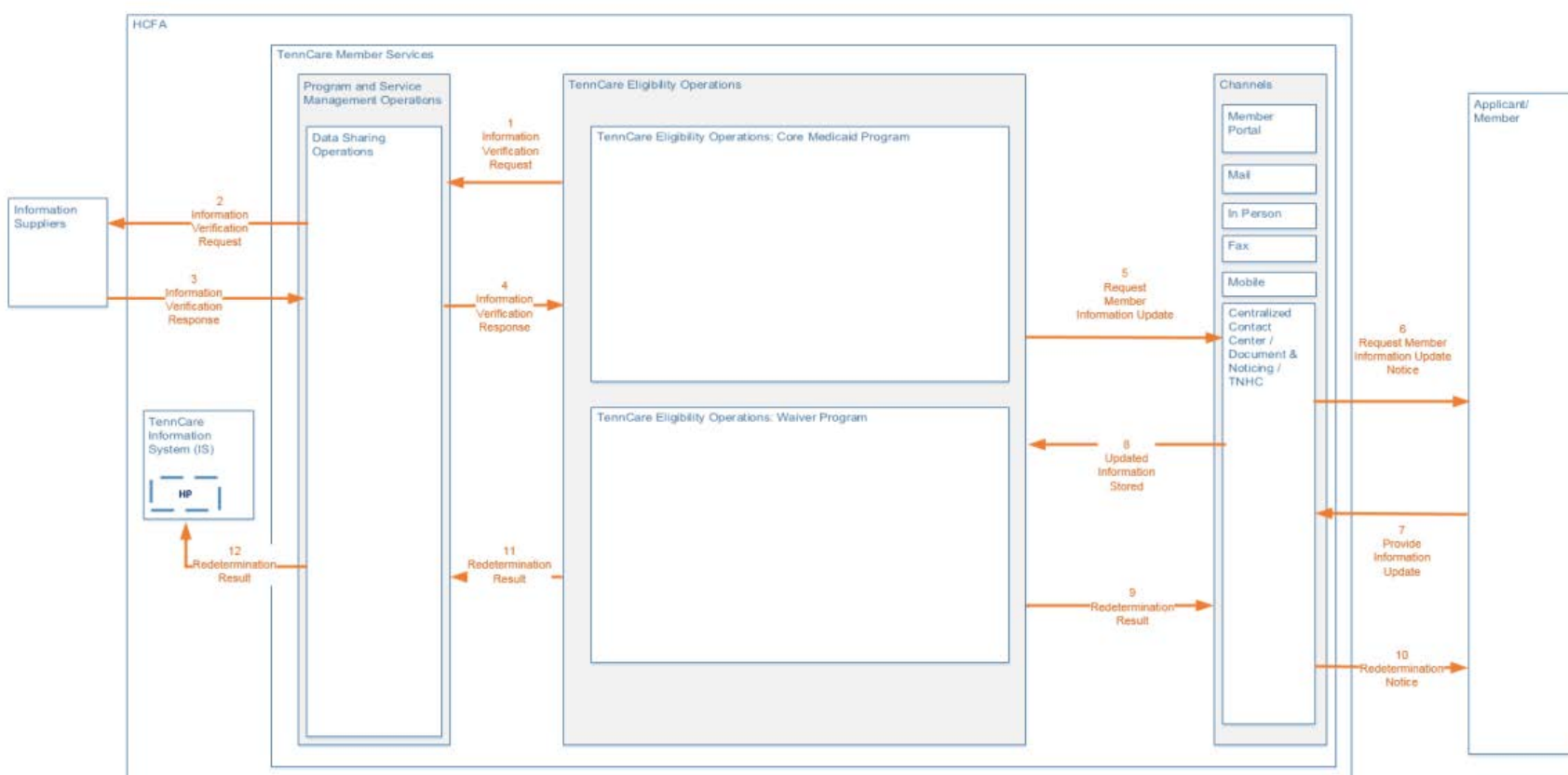
Figure 11-9 Denial for MAGI Medicaid and CHIP (via Self Service Portal)



11.10 REDETERMINATIONS

As shown in [Figure 11-10](#), TEDS automatically triggers information verification requests from external sources for Medicaid Redetermination when a currently enrolled member's annual enrollment period is coming to an end. TEDS verifies the member's current circumstances with external data sources. TEDS allows for any information update from the member and notifies the member of the Redetermination result. In a similar manner, if the applicant initiates an update to their application (via change of circumstances), then TEDS will determine using the new information, and reschedule the redetermination date to be a year from the date submitted.

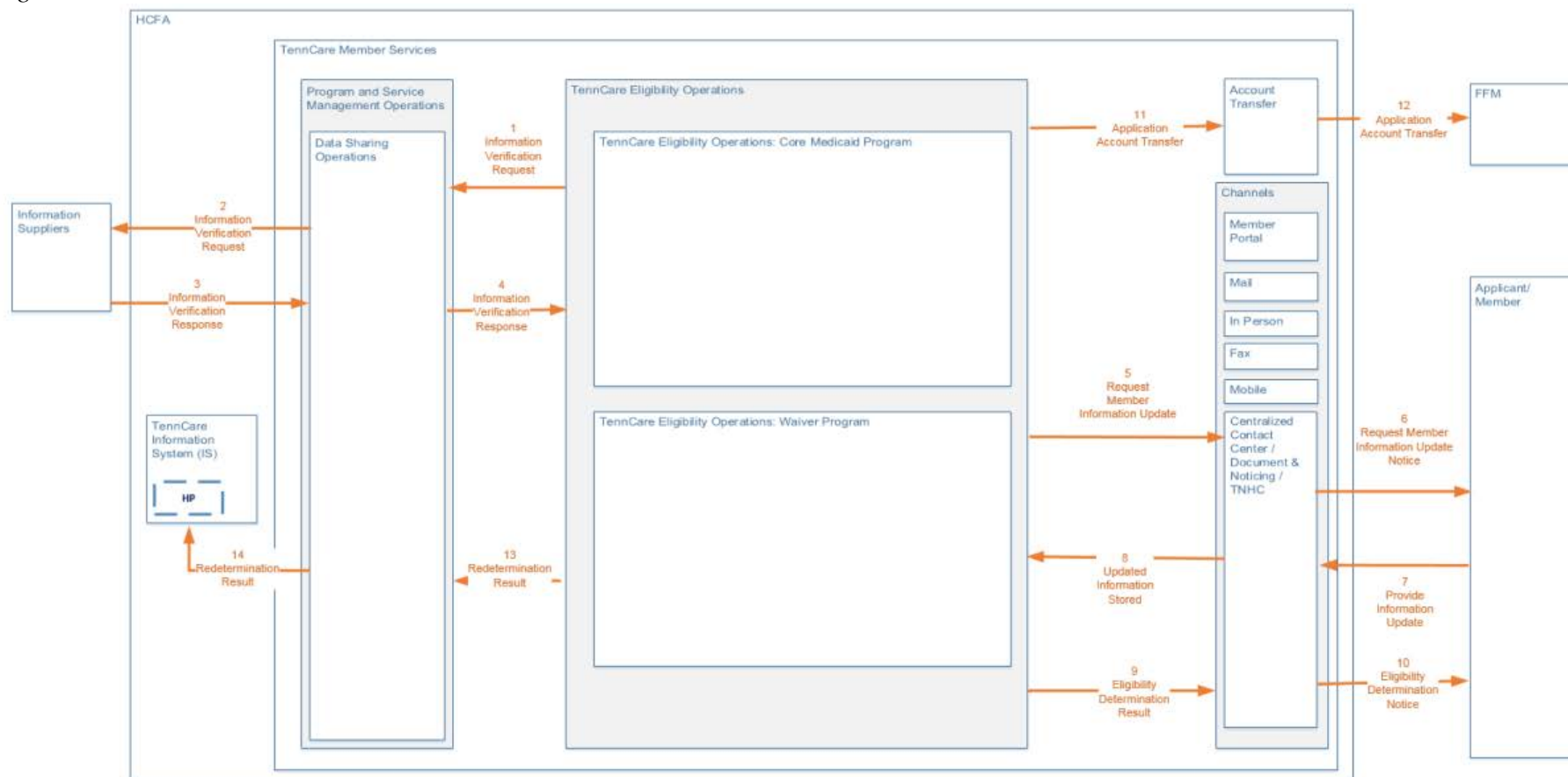
Figure 11-10 Redeterminations Future State Model



11.11 REDETERMINATION DENIAL

As shown in [Figure 11-11](#), TEDS automatically triggers information verification request from external sources for Medicaid Redetermination of a currently enrolled member whose annual enrollment period is coming to an end. TEDS allows for any information update and notifies the member of the ineligibility to meet MAGI-CHIP or MAGI-Medicaid requirements. Denial at the redetermination process does not transfer the individual's account to the FFM; the individual must apply.

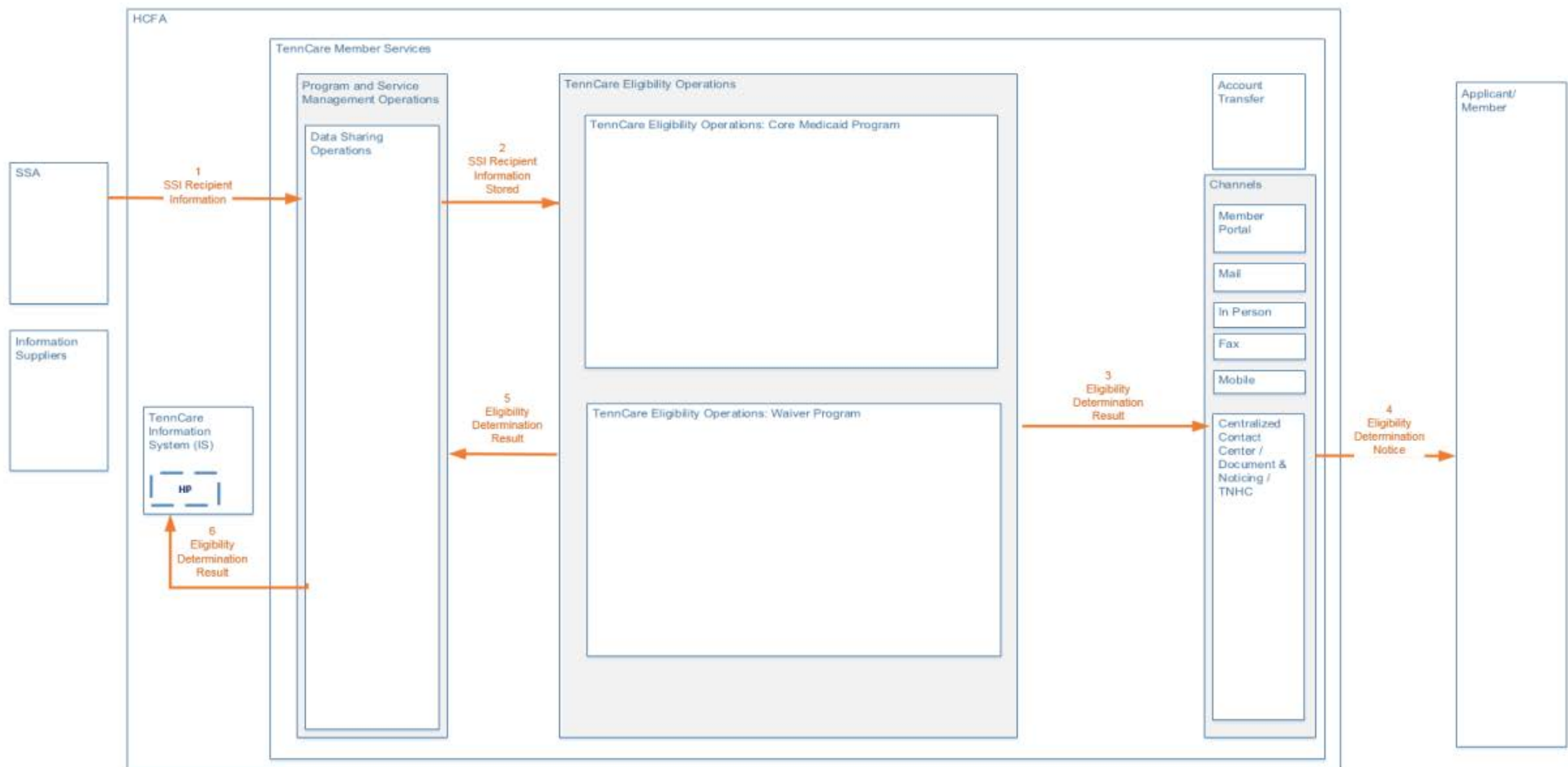
Figure 11-11 Denial Case: Redeterminations Future State Model



11.12 SSI

As shown in [Figure 11-12](#), SSA shall send a file of SSI recipients to TEDS on a defined routine basis. TEDS shall automatically receive and process the SSA's batch SDX file and notify the member of the eligibility determination result.

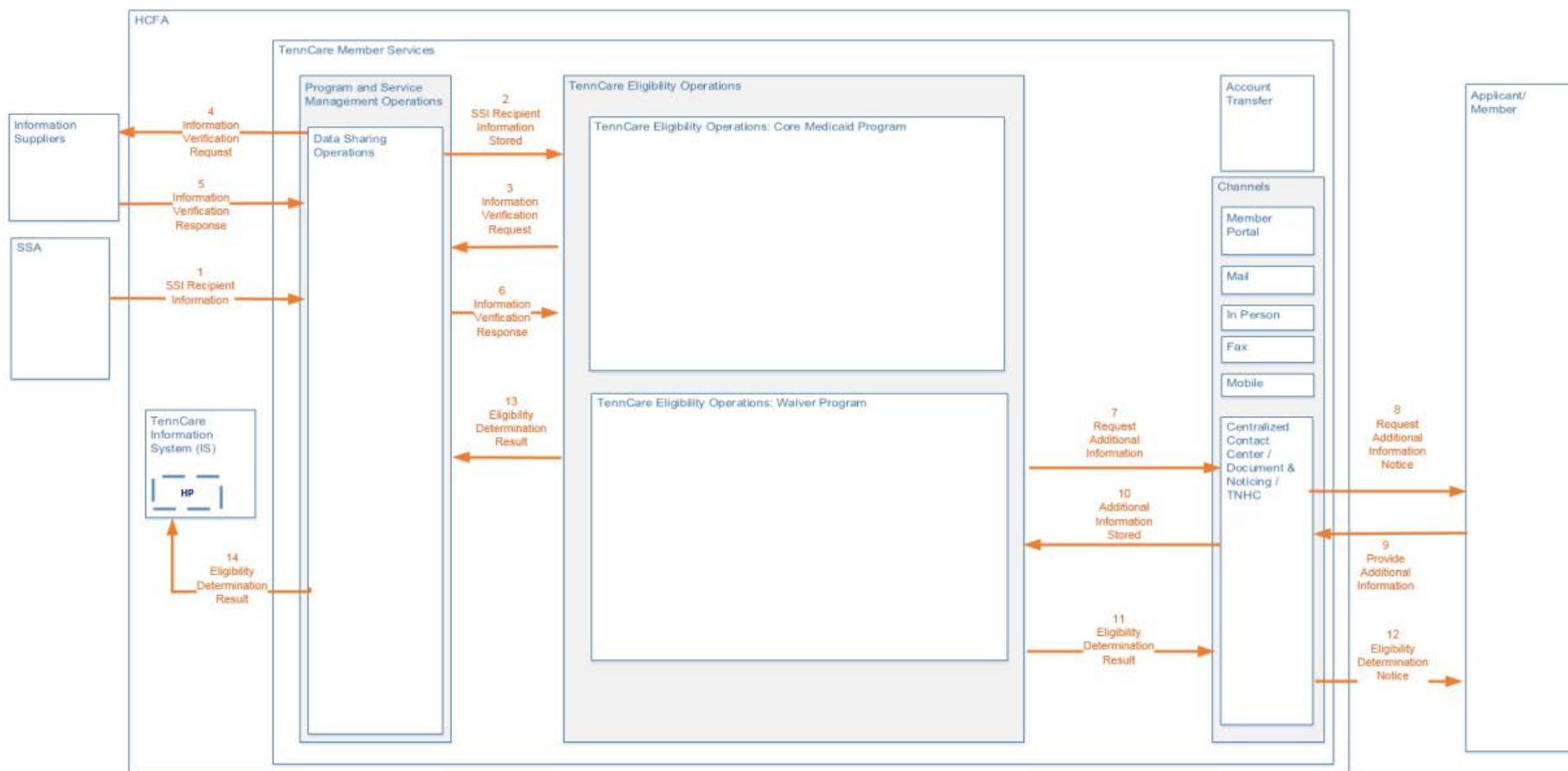
Figure 11-12 SSI Future State Model



11.13 SSI-RELATED (VIA SSA ASSESSMENT)

As shown in [Figure 11-13](#), SSA shall send a file of SSI recipients to TEDS on a defined routine basis. TEDS shall automatically receive and process the SSA's batch SDX file and request additional information from members. TEDS shall notify the member of the eligibility determination based on a review of the applicant's submitted documents and additional information received.

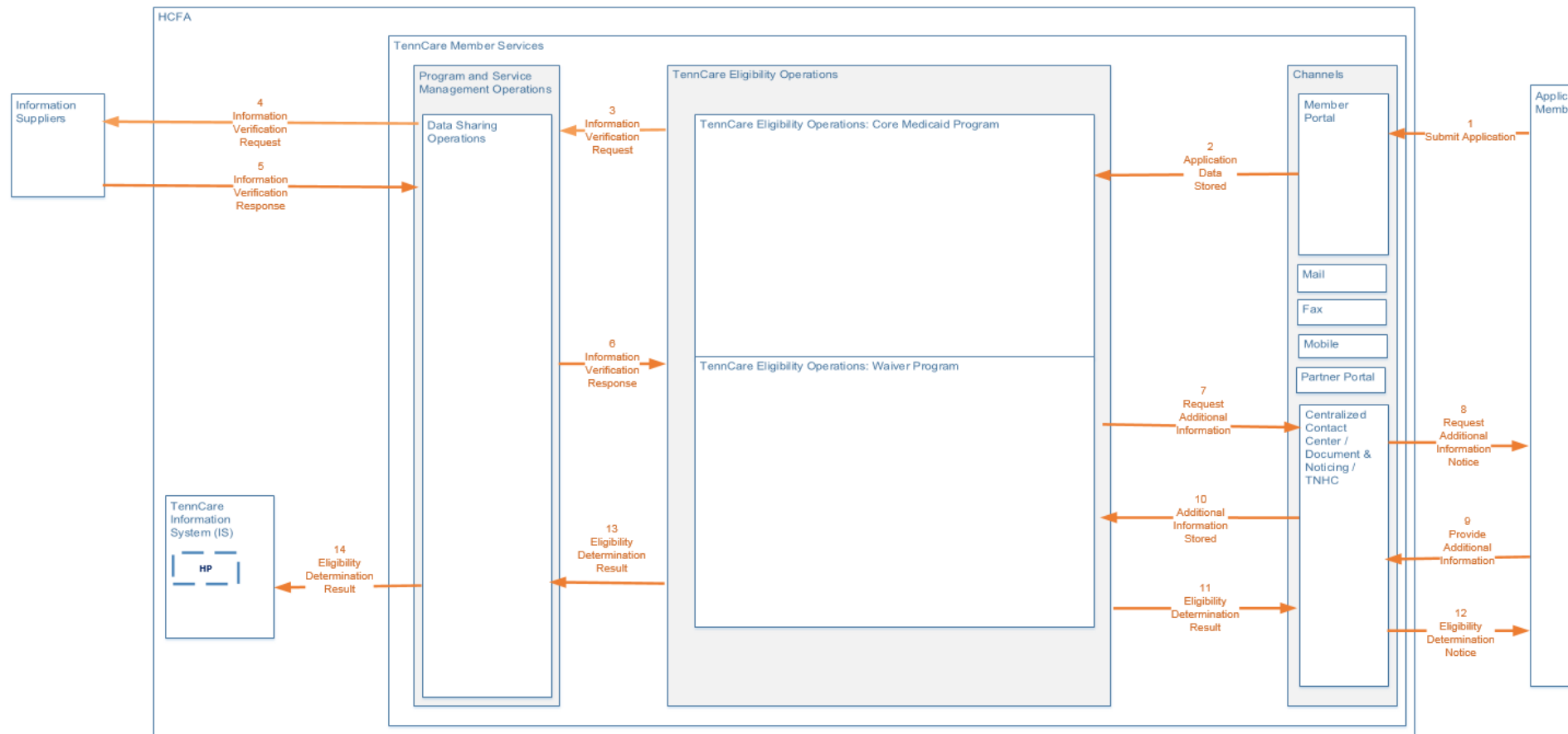
Figure 11-13 SSI-Related Future State Model



11.14 MEDICARE SAVINGS PROGRAM AND SSI-RELATED (VIA SELF SERVICE PORTAL)

As shown in [Figure 11-14](#), a person who is not currently enrolled in TennCare shall be able to submit an application for benefits directly to the State through the online member portal. TEDS shall verify the applicant's information, using data from external sources for MSP, Pickle Passalong, DAC, and Widow/Widower eligibility requirements and notify the applicant of the eligibility determination result.

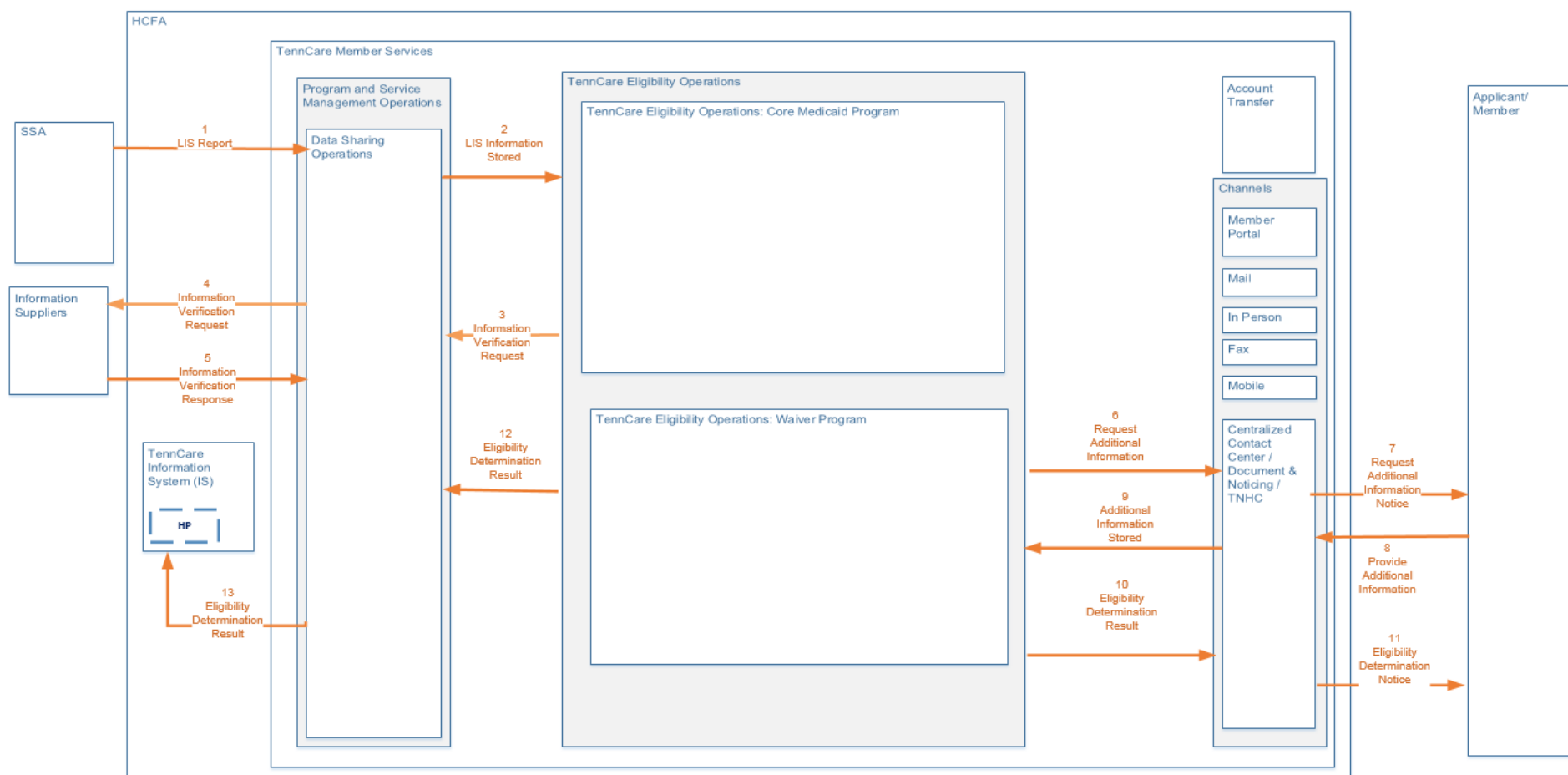
Figure 11-14 Medicare Savings Program (via Portal) Future State Model



11.15 MEDICARE SAVINGS PROGRAM (LIS TRIGGER)

As shown in [Figure 11-15](#), a person who is not currently enrolled in TennCare/Medicaid can apply for LIS through the SSA office. SSA shall send a batch LIS file to TEDS that will open a case and trigger a review for MSP eligibility. TEDS shall verify the information and notify the applicant of the eligibility determination result.

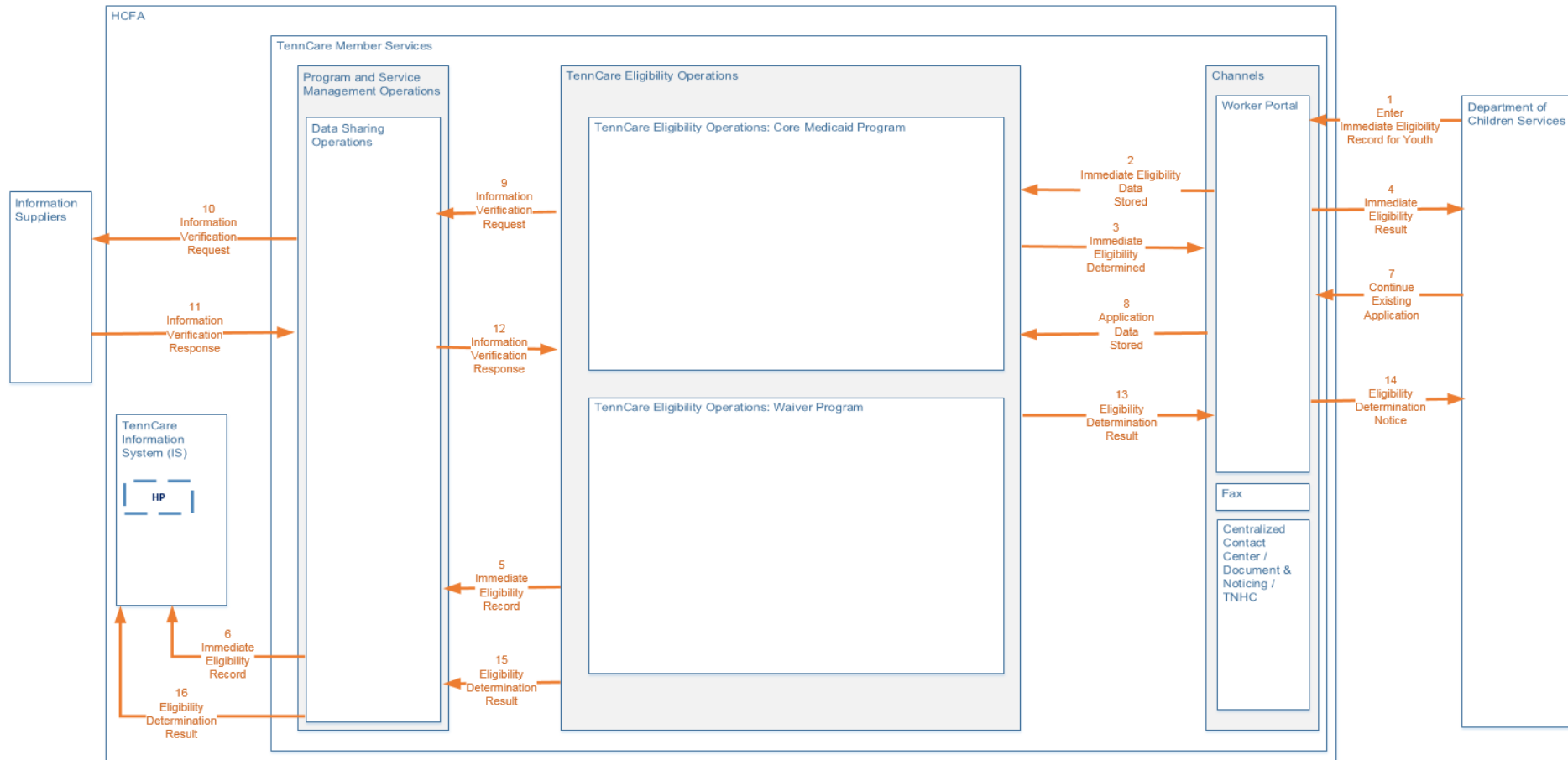
Figure 11-15 Medicare Savings Program (via Low Income Subsidy Report)



11.16 CURRENT FOSTER CARE/STATE CUSTODY/ADOPTION ASSISTANCE

As shown in [Figure 11-16](#), DCS Staff has access to TEDS online worker portal and can initiate and complete an application on behalf of individuals in DCS custody. TEDS shall verify the information from external sources and notify DCS of the eligibility determination result.

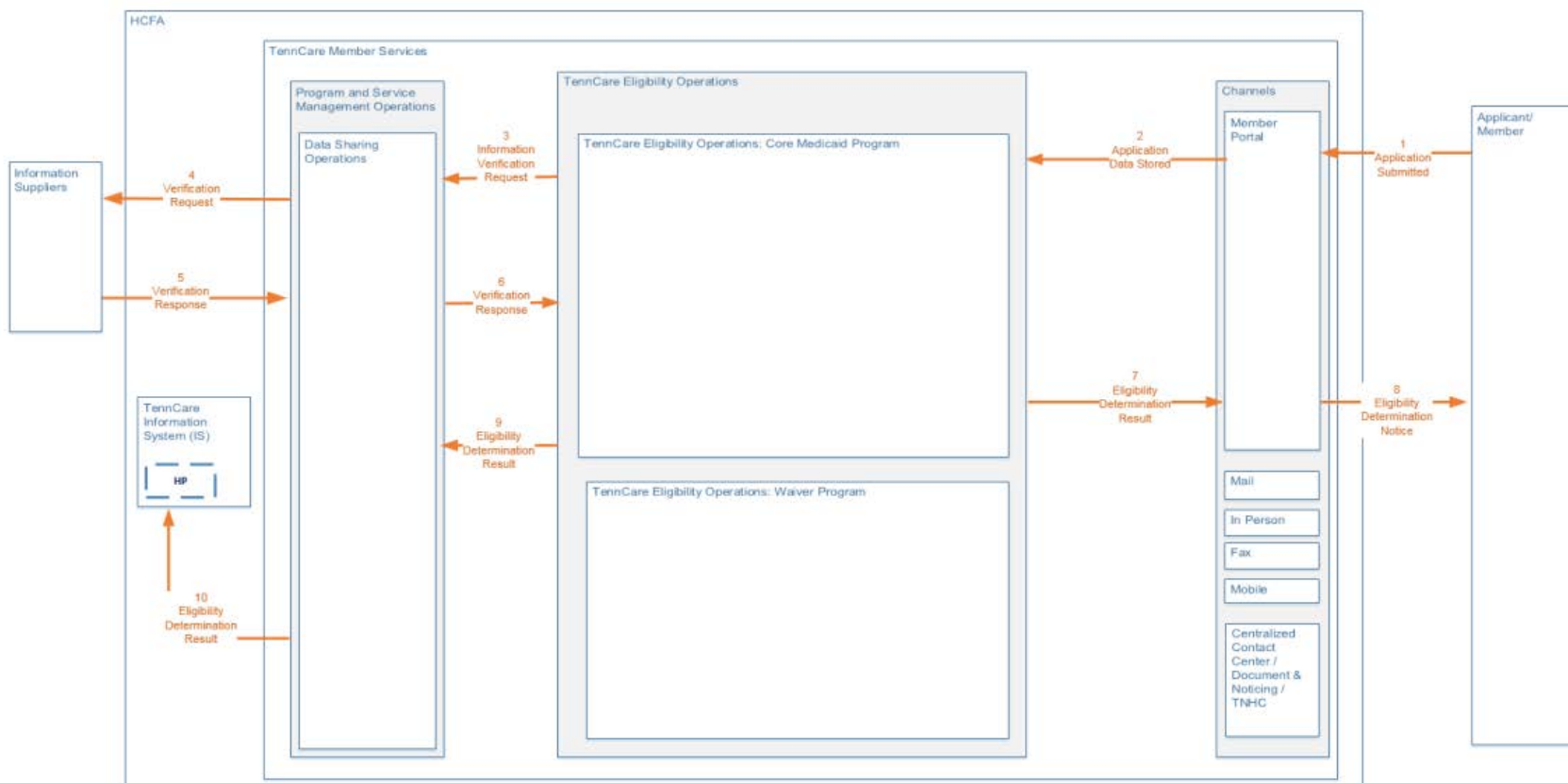
Figure 11-16 Child Currently in Foster Care Future State Model



11.17 FORMER FOSTER CARE

As shown in [Figure 11-17](#), a person who was previously receiving Medicaid while in foster care within the State of Tennessee, and was receiving benefits when the individual aged out of foster care, shall be able to identify the former foster care information on the HCFA's streamlined application. The application shall be accepted directly by HCFA though any intake channel, including self-service member portal. TEDS shall verify the information from external sources and notify the applicant of the eligibility determination result.

Figure 11-17 Adult with Former Foster Care Future State Model



12 BUSINESS REQUIREMENTS

This section summarizes all the top-level business requirements that were modeled in Sections [11.1](#) through [11.17](#). The purpose of the list is to consolidate requirements, identifying common requirements that apply to multiple scenario programs. The sequence order is as collected from the workshop inputs (with no inference of priority or impact). Each specific requirement is also traced to the KERA capability reference model, to assure complete coverage of all capabilities necessary to achieve the future state vision. [APPENDIX D:](#) includes additional information regarding KERA capabilities.

Business requirements are defined as the higher-level statements of the goals, objectives, or needs of the HCFA enterprise. Business requirements describe needs of the organization as a whole, and not groups or stakeholders within it. They were developed and defined through the model-based requirements analysis. Business requirements are traceable to the stakeholder needs defined in [Section 9](#). Solution requirements were then developed from these business requirements, thus enabling full traceability from the solution to a need.

Table 12-1 Business Requirements and Core Capabilities Summary

#	KERA Capability	Requirement Description	1-MAGI-MEDICAID & CHIP (FFM)	2-MAGI-MEDICAID & CHIP (PORTAL)	3-NON-MAGI LTSS	4-NON-MAGI BCC	5-NON-MAGI MEDICALLY NEEDY	6-EMERGENCY MEDICAL SERVICES	7-PRESUMPTIVE PREGNANCY/HOSPITAL PRESUMPTIVE	8-DENIAL: MAGI-MEDICAID & CHIP (FFM)	9-DENIAL: MAGI-MED & CHIP (PORTAL)	10-REDETERMINATION	11-REDETERMINATIONS DENIAL	12-SSI	13-SSI-RELATED	14-MSP (Via Portal)	15-MSP (via LIS Report)	16-CURRENT FOSTER CARE	17-FORMER FOSTER CARE
1	Eligibility Intake Establish Shared Client Information	The business shall have the ability to electronically accept applications from the FFM, Non-MAGI referrals, and Former Foster Care applications via Account Transfer.	✓							✓									✓

#	KERA Capability	Requirement Description	1-MAGI MEDICAID & CHIP (FFM)	2-MAGI MEDICAID & CHIP (PORTAL)	3-NON-MAGI LTSS	4-NON-MAGI BCC	5-NON-MAGI MEDICALLY NEEDY	6-EMERGENCY MEDICAL SERVICES	7-PRESUMPTIVE PREGNANCY / HOSPITAL PRESUMPTIVE	8-DENIAL: MAGI MEDICAID & CHIP (FFM)	9-DENIAL: MAGI MED & CHIP (PORTAL)	10-REDETERMINATION	11-REDETERMINATIONS DENIAL	12-SSI	13-SSI-RELATED	14-MSP (Via Portal)	15-MSP (via LIS Report)	16-CURRENT FOSTER CARE	17-FORMER FOSTER CARE
2	Eligibility Intake Establish Shared Client Information	The business shall have the ability to electronically accept application and other documents via Member Portal.		✓	✓	✓	✓		✓		✓				✓	✓			✓
3	Eligibility Intake Establish Shared Client Information	The business shall have the ability to electronically accept application and other documents via Worker Portal.				✓	✓								✓			✓	✓
4	Eligibility Intake Establish Shared Client Information	The business shall have the ability to electronically accept applications and other documents via the Partner Portal.				✓		✓	✓										
5	Manage Applicant and Member Information	The business shall have the ability to submit an acknowledgement to the FFM upon receiving the application via Account Transfer.								✓									
6	Manage Applicant and Member Information Manage Shared Client Information	The business shall have the ability to electronically store application data via Account Transfer.	✓		✓	✓	✓			✓									✓
7	Manage Applicant and Member Information Manage Shared Client Information	The business shall have the ability to electronically store application data via Member Portal.		✓	✓	✓	✓	✓	✓		✓				✓	✓			✓

#	KERA Capability	Requirement Description	1-MAGI MEDICAID & CHIP (FFM)	2-MAGI MEDICAID & CHIP (PORTAL)	3-NON-MAGI LTSS	4-NON-MAGI BCC	5-NON-MAGI MEDICALLY NEEDY	6-EMERGENCY MEDICAL SERVICES	7-PRESUMPTIVE PREGNANCY / HOSPITAL PRESUMPTIVE	8-DENIAL: MAGI MEDICAID & CHIP (FFM)	9-DENIAL: MAGI MED & CHIP (PORTAL)	10-REDETERMINATION	11-REDETERMINATIONS DENIAL	12-SSI	13-SSI-RELATED	14-MSP (Via Portal)	15-MSP (via LIS Report)	16-CURRENT FOSTER CARE	17-FORMER FOSTER CARE
8	Manage Applicant and Member Information Manage Shared Client Information	The business shall have the ability to electronically store application data via Worker Portal.				✓	✓									✓		✓	✓
9	Manage Applicant and Member Information Manage Shared Client Information	The business shall have the ability to electronically store application data via the Partner Portal.					✓	✓	✓										
10	Manage Applicant and Member Information Manage Shared Client Information	The business shall have the ability to automatically request information verification from information suppliers via data sharing operations.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
11	Verify Application and Exemption Information Capture Inquiry Request Assess Inquiry Request Provide Answer to Inquiry Manage Information Sharing with Partners	The business shall have the ability to automatically receive information verification response from information suppliers via data sharing operations.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
12	Manage Applicant and Member Information	The business shall have the ability to automatically designate additional information needed to determine eligibility.		✓	✓		✓	✓			✓	✓	✓		✓	✓	✓	✓	✓

#	KERA Capability	Requirement Description	1-MAGI MEDICAID & CHIP (FFM)	2-MAGI MEDICAID & CHIP (PORTAL)	3-NON-MAGI LTSS	4-NON-MAGI BCC	5-NON-MAGI MEDICALLY NEEDY	6-EMERGENCY MEDICAL SERVICES	7-PRESUMPTIVE PREGNANCY / HOSPITAL PRESUMPTIVE	8-DENIAL: MAGI MEDICAID & CHIP (FFM)	9-DENIAL: MAGI MED & CHIP (PORTAL)	10-REDETERMINATION	11-REDETERMINATIONS DENIAL	12-SSI	13-SSI-RELATED	14-MSP (Via Portal)	15-MSP (via LIS Report)	16-CURRENT FOSTER CARE	17-FORMER FOSTER CARE
13	Manage Applicant and Member Information Create/update/delete standard notification	The business shall have the ability to automatically create and populate a “request for additional information” notice.		✓	✓		✓	✓			✓	✓	✓		✓	✓	✓	✓	✓
14	Manage Applicant and Member Information Manage Shared Client Information Manage Case Information	The business shall have the ability to electronically store additional information, including documents and images.		✓	✓		✓	✓			✓	✓	✓		✓	✓	✓	✓	✓
15	Verify Application and Exemption Information Manage Information Sharing with Partners	The business shall have the ability to automatically request information from an external source via data sharing operations.	✓	✓	✓	✓	✓	✓	✓						✓	✓	✓		✓
16	Verify Application and Exemption Information Capture Inquiry Request Assess Inquiry Request Provide Answer to Inquiry Manage Information Sharing with Partners	The business shall have the ability to automatically receive information from an external source via data sharing operations.		✓	✓	✓	✓	✓	✓					✓	✓	✓	✓		✓
17	Manage Applicant and Member Information Manage Shared Client Information	The business shall have the ability to electronically store information from an external source via data sharing operations.												✓	✓		✓		

#	KERA Capability	Requirement Description	1-MAGI MEDICAID & CHIP (FFM)	2-MAGI MEDICAID & CHIP (PORTAL)	3-NON-MAGI LTSS	4-NON-MAGI BCC	5-NON-MAGI MEDICALLY NEEDY	6-EMERGENCY MEDICAL SERVICES	7-PRESUMPTIVE PREGNANCY / HOSPITAL PRESUMPTIVE	8-DENIAL: MAGI MEDICAID & CHIP (FFM)	9-DENIAL: MAGI MED & CHIP (PORTAL)	10-REDETERMINATION	11-REDETERMINATIONS DENIAL	12-SSI	13-SSI-RELATED	14-MSP (Via Portal)	15-MSP (via LIS Report)	16-CURRENT FOSTER CARE	17-FORMER FOSTER CARE
18	Determine Eligibility	The business shall have the ability to automatically determine eligibility of applicant and store eligibility results.	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
19	Determine Eligibility	The business shall have the ability to automatically redetermine eligibility of the member and store the results.										✓	✓						
20	Determine Eligibility	The business shall have the ability to automatically determine presumptive eligibility of the individual and store the results.				✓			✓										
21	Manage Applicant and Member Information Create/update/delete standard notification	The business shall have the ability to automatically create and populate an eligibility determination notice with appropriate information.	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
22	Manage Applicant and Member Information Create/update/delete standard notification	The business shall have the ability to generate an eligibility redetermination notice.										✓	✓						
23	Manage Applicant and Member Information Create/update/delete standard notification	The business shall have the ability to generate a presumptive eligibility determination notice.				✓			✓										

#	KERA Capability	Requirement Description	1-MAGI MEDICAID & CHIP (FFM)	2-MAGI MEDICAID & CHIP (PORTAL)	3-NON-MAGI LTSS	4-NON-MAGI BCC	5-NON-MAGI MEDICALLY NEEDY	6-EMERGENCY MEDICAL SERVICES	7-PRESUMPTIVE PREGNANCY / HOSPITAL PRESUMPTIVE	8-DENIAL: MAGI MEDICAID & CHIP (FFM)	9-DENIAL: MAGI MED & CHIP (PORTAL)	10-REDETERMINATION	11-REDETERMINATIONS DENIAL	12-SSI	13-SSI-RELATED	14-MSP (Via Portal)	15-MSP (via LIS Report)	16-CURRENT FOSTER CARE	17-FORMER FOSTER CARE
24	Manage Applicant and Member Information	The business shall have the ability to electronically submit an application to the FFM via Account Transfer.	✓							✓	✓		✓						
25	Manage Case Information	The business shall have the ability to automatically submit an eligibility determination result to an external source via data sharing operations.	✓	✓	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	✓
26	Manage Case Information	The business shall have the ability to automatically submit an eligibility redetermination result to an external source via data sharing operations.										✓	✓						
27	Manage Applicant and Member Information	The business shall have the ability to electronically provide an eligibility determination result via Worker Portal.				✓			✓										
28	Manage Case Information	The business shall have the ability to automatically submit a presumptive eligibility determination result to an external source via data sharing operations.				✓			✓										

13 BUSINESS PROCESSES

Business processes are modeled to identify the in-scope business activities and the sequence and relationship of activities. Functionality that is common (utilized by) multiple activities is identified. Business activities are classified as either fully automated processes, performed without requiring any worker interaction (also known as back-end processing) or semi-automated processes, which require workers to review information and enter decisions. Activities that are performed manually by workers or via processes controlled outside of TEDS (such as performed by the applicant or member) are also identified, to realize a complete end-to-end coverage of inputs and outcomes.

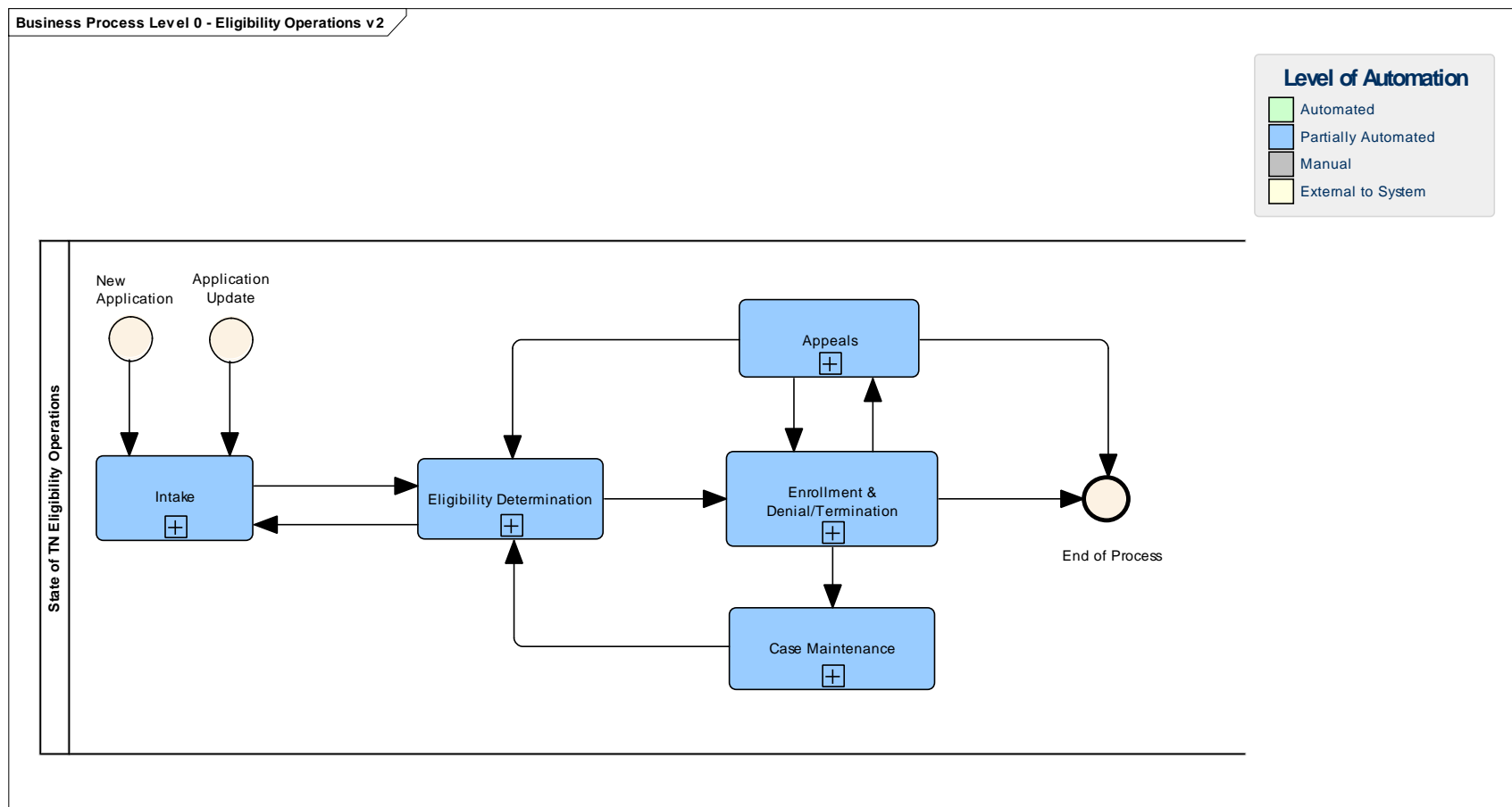
13.1 OVERALL ELIGIBILITY OPERATIONS (HIGH LEVEL 0)

The high-level flow is an abstraction of the overall process for determining health care eligibility, both for new applicants and applicants/members who are updating their information (reporting a change of circumstances).

Each process flow shows the level of automation that the system is expected to provide to perform each activity

- **Automated** – Process flows/activities that will be fully automated by the Solution. In addition, any related subprocess flows and/or activities are also fully automated by the Solution.
- **Partially Automated** – Process flows/activities that contain a combination of automated and manual subprocess flows and/or activities.
- **Manual** – Process flows/activities that will not be automated by the Solution.
- **External to the System** – Process flows/activities that occur outside of the Solution

Figure 13-1 Eligibility Operations – Top Level



13.2 INTAKE BUSINESS PROCESSES (LEVEL 1)

Eligibility operations are triggered through the intake of member/applicant information. The process flow models the different channels and roles participating in the intake process. For all intake channels, the application filer is prompted to provide information about the applicant, and to provide information about other persons who are necessary/required to determine the applicant's eligibility. The application process for all channels is dynamically guided, collecting only the information necessary to determine the person's eligibility for applicable categories.

An application can be submitted (or updated) by an:

- Applicant (individual requesting assistance)
- Adult who lives in the home with the applicant, if the applicant is a minor
- Applicant's designated Authorized Representative
- Individual acting responsibly for the applicant, if the applicant is a minor or incapacitated.
 - Incapacitated individuals may be assisted by a social worker, hospital, or nursing home facilitator.
- Individual being assisted in the application process by a CAC.

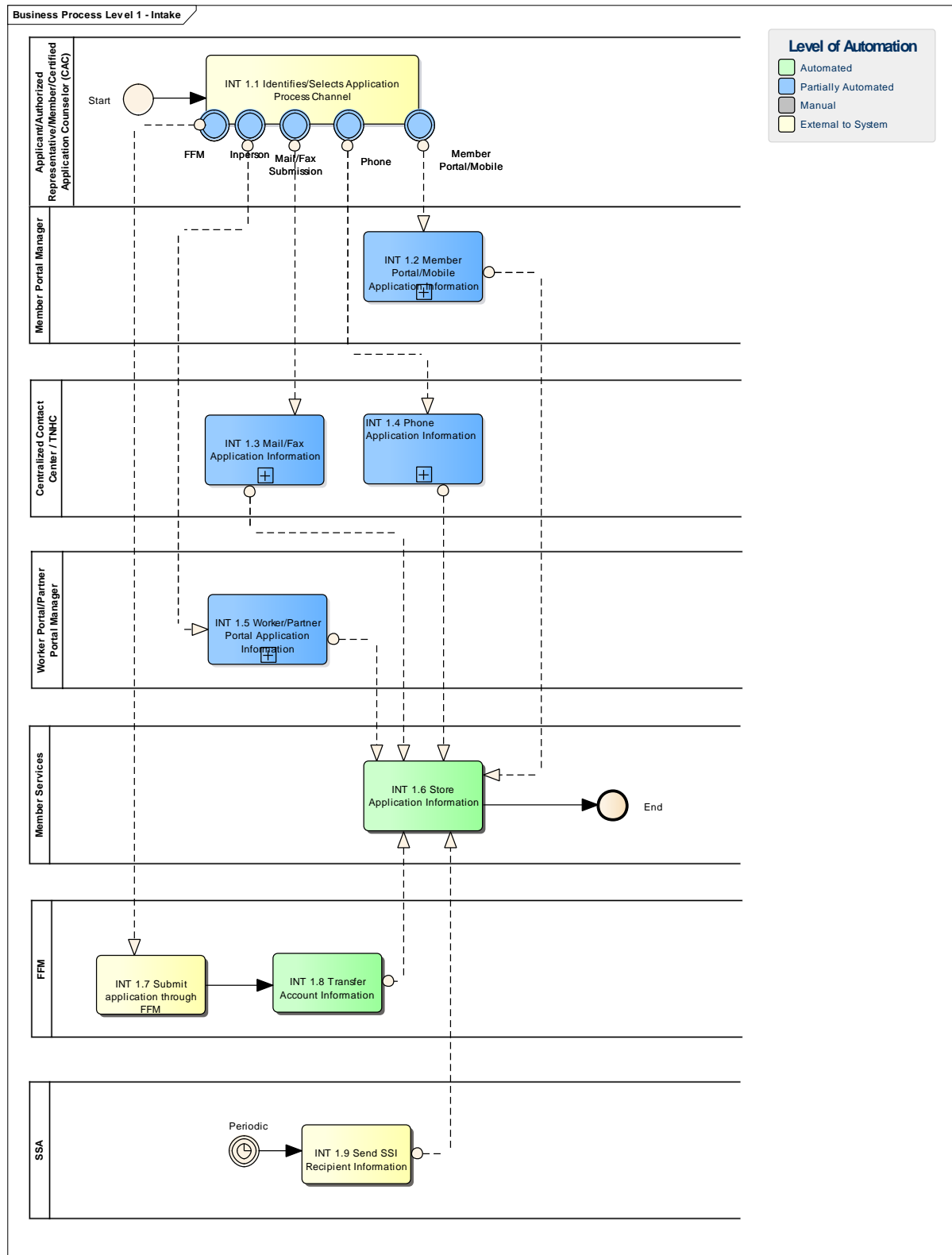
The communication channels to apply for healthcare financial assistance include:

- Apply to FFM
 - Via FFM channels of online federal portal, mailed paper (handwritten) application or phone to the FFM Call Center
 - The FFM will process the application, performing verifications of attested information and an assessment of relevant eligibility categories
 - Applicants that are potentially Medicaid or CHIP eligible, or are appropriate for a non-MAGI determination, will be account transferred to HCFA
 - FFM will communicate inconsistent applications to HCFA, so that applicants may receive assistance to resolve the inconsistency and get an eligibility determination from HCFA
- In-person at multiple State Department of Health locations, to receive assistance with a presumptive application for breast cervical cancer or presumptive pregnancy
- Receive in-person assistance at authorized hospital or nursing home partner organizations, where a trained application counselor performs the data entry for an individual's application

- Mail or fax a paper (handwritten) application to TN Centralized Contact Center
- Phone to provide verbal information to the TN Centralized Contact Center
- Independently apply on-line via a Member portal, or potentially via a mobile-friendly application interface.
- Apply to SSA for SSI
 - SSA will process the application and send HCFA an SDX file of SSI recipients

Subsequent levels detail the intake processes for in-person, mail/fax, and phone and member portal.

Figure 13-2 Intake Business Process (Level 1)

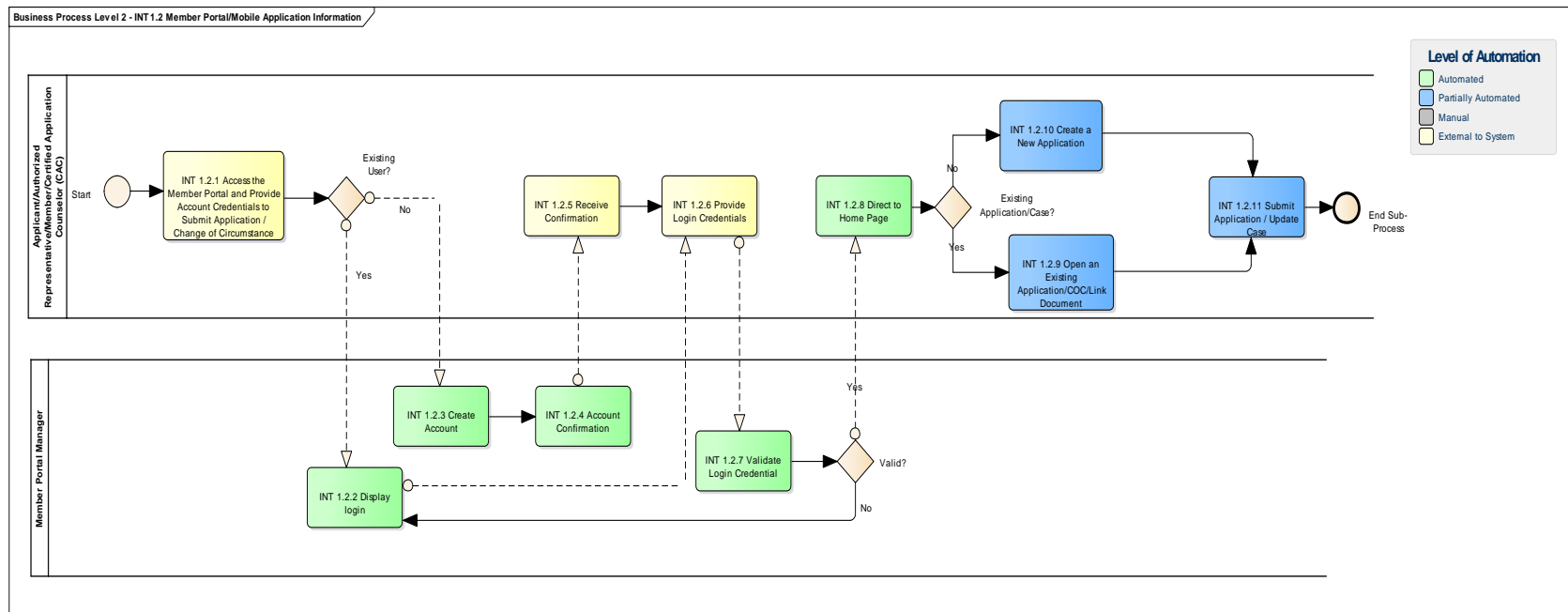


13.2.1 Member Portal/Mobile Application Information (Level 2)

When the applicant/member accesses the member portal, they identify as an existing account or as a new consumer-role user.

- New consumer-role users are guided to create an account, then login.
- Existing consumer-role users are prompted to login, and have their credentials verified.
- Once verified, the consumer-role user has access to their account. Among other account holder functions, the user may select to create a new application (from blank) or to update a prior application (report a change of circumstances or correction to application information). After providing application information, the user electronically signs the application and submits it.

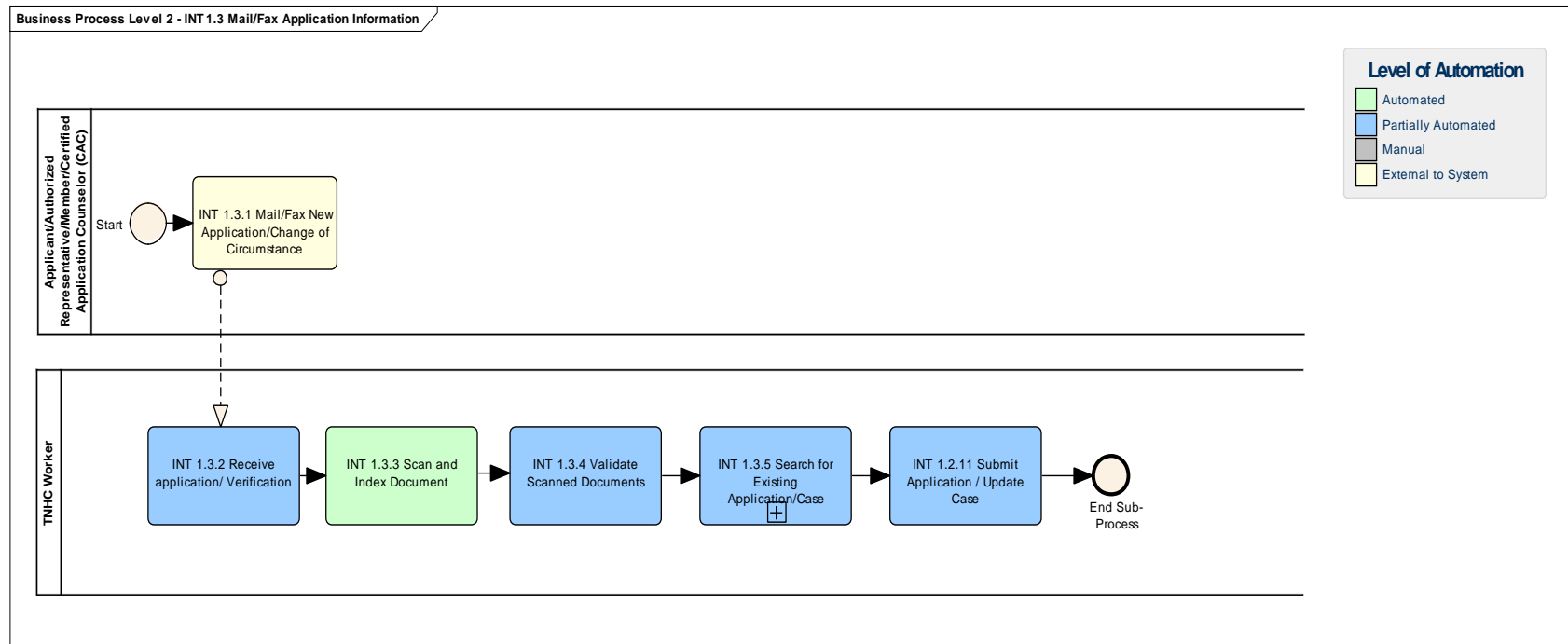
Figure 13-3 Member Portal (or Mobile) – Enter Application Information (Level 2)



13.2.2 Mail/Fax Application Information (Level 2)

An Applicant, Member, Authorized Representative, or CAC can mail/fax new applications or an update to TNHC, the Centralized Contact Center. A TNHC worker then scans the document and reviews the data captured automatically, visually verifying to assure accuracy. The TNHC worker indexes to associate the document to an existing specific application filer/case, or creates a new case.

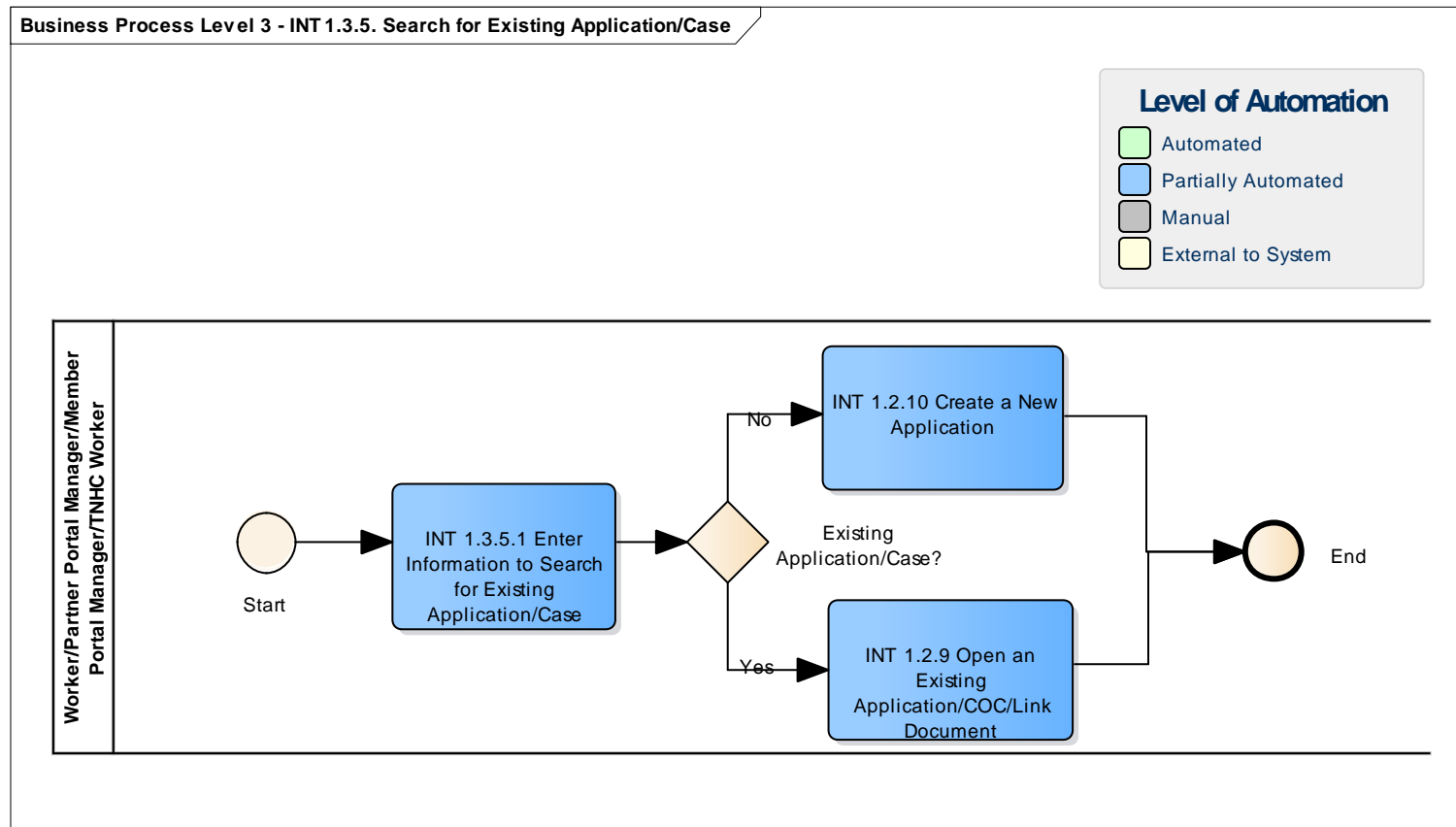
Figure 13-4 Mail/Fax – Receive Application Information (Level 2)



13.2.2.1 Search for Existing Application/Case (Level 3)

Within the mail/fax intake process, the TNHC worker searches TEDS to determine if there is an existing case for the application filer, or creates a new case.

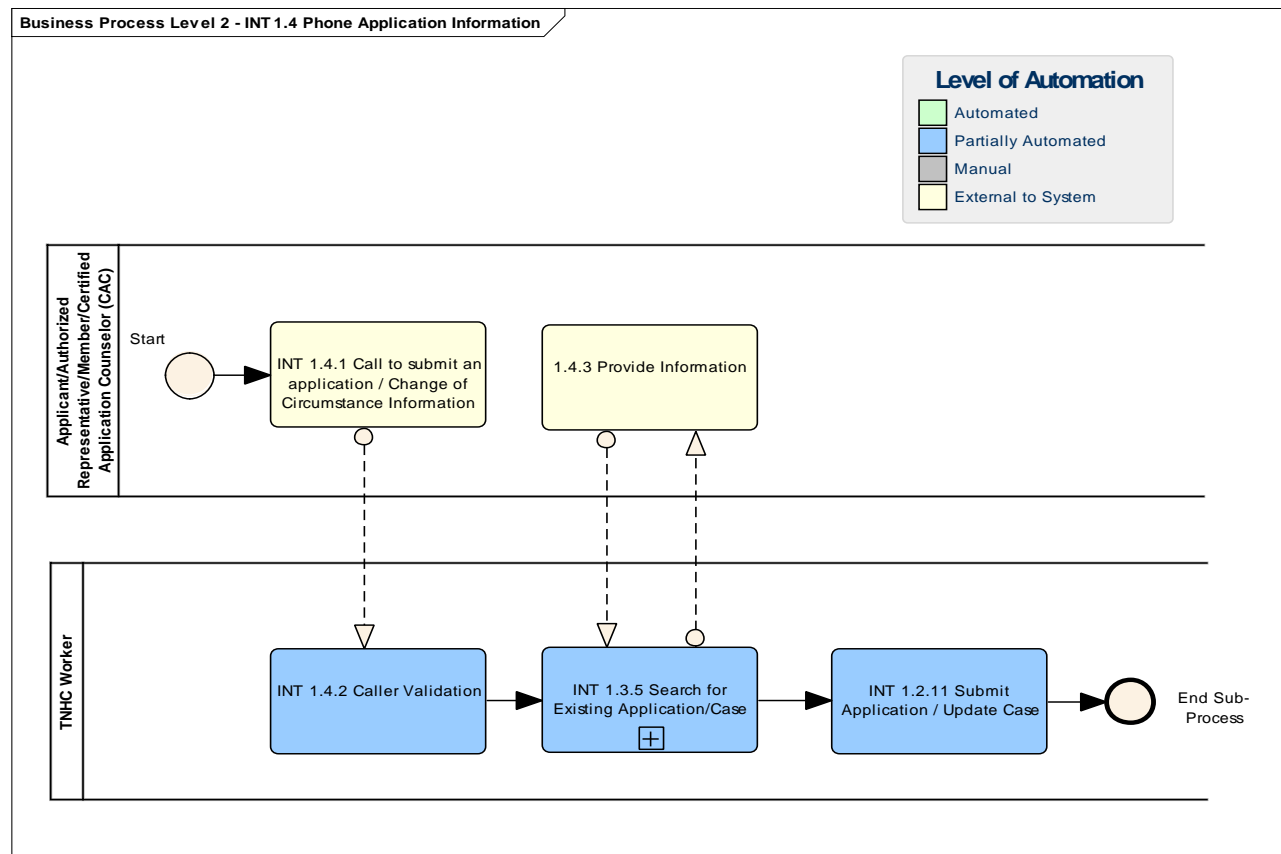
Figure 13-5 Worker Searches for Existing Application/Case (Level 3)



13.2.3 Phone Application Information (Level 2)

The Phone intake channel is via the TNHC Centralized Contact Center. After the caller identity is validated, the TNHC worker will search for an existing application/case or create a new case. The TNHC Worker will perform the data entry, interviewing the applicant to collect necessary information. Via the phone, the applicant may either authorize to save the information and return at a later time to finish the process or may authorize to submit the completed application for further processing.

Figure 13-6 Worker Intakes Application via Phone (Level 2)



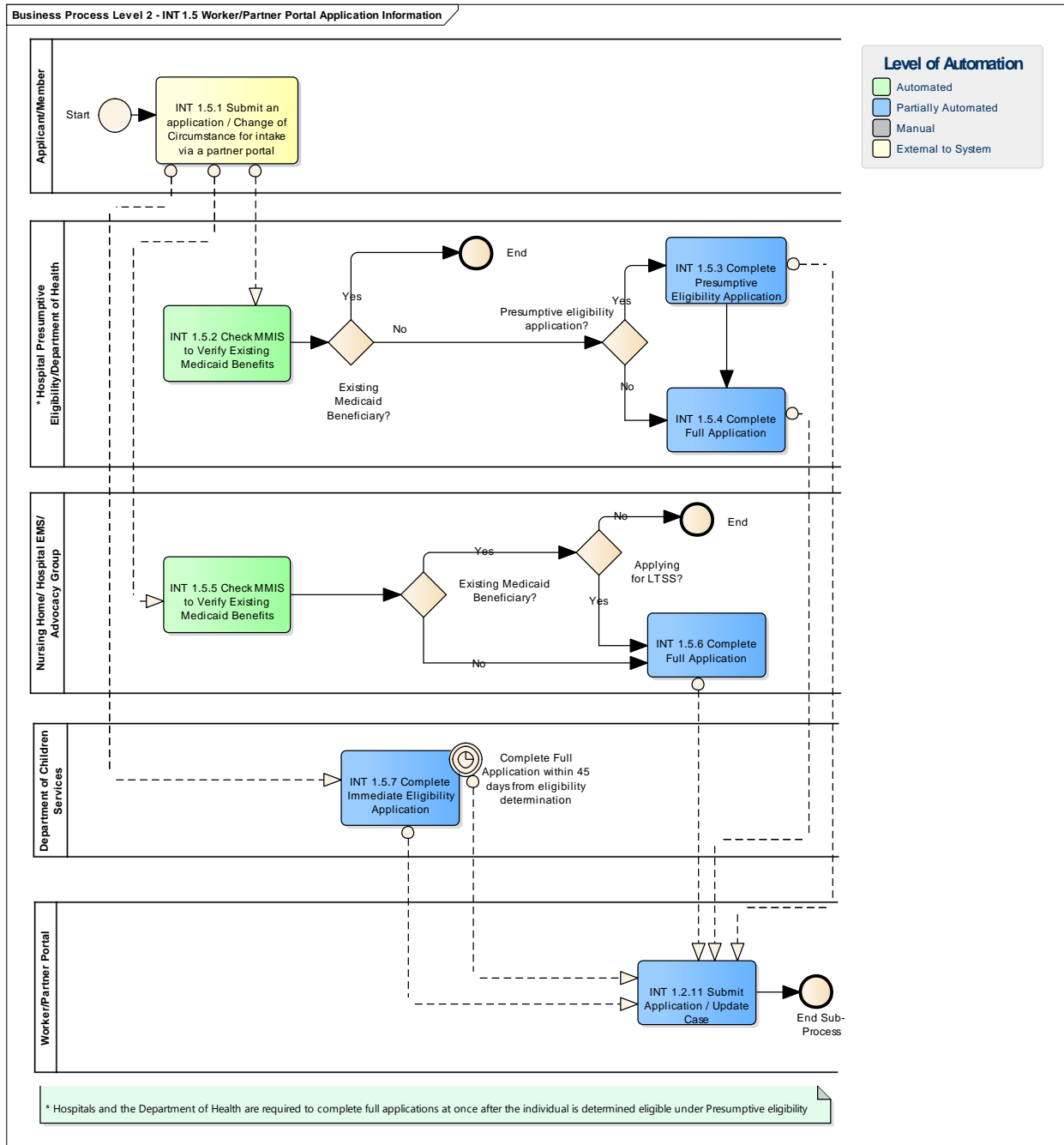
13.2.4 Worker/Partner Portal Application Information (Level 2)

The in-person assistance process is designed to accommodate specific programs. For authorized Hospitals or Nursing Home partners (including authorized Advocacy Groups), TEDS performs an automatic initial check of MMIS to determine if the potential applicant already has existing Medicaid benefits

- Nursing homes may update an existing Medicaid Member's information to apply for LTSS
- Nursing homes may apply for general healthcare financial assistance or LTSS assistance, if the individual does not already have existing Medicaid benefits
- Hospitals may collect information/apply for presumptive pregnancy (or hospital presumptive), followed by a full healthcare application (including application for EMS); or they may complete only a full healthcare application

DCS workers enter information for immediate eligibility for a child in the department's care, followed by a full application within 45 days.

Figure 13-7 Worker Portal / Partner Portal (Level 2)

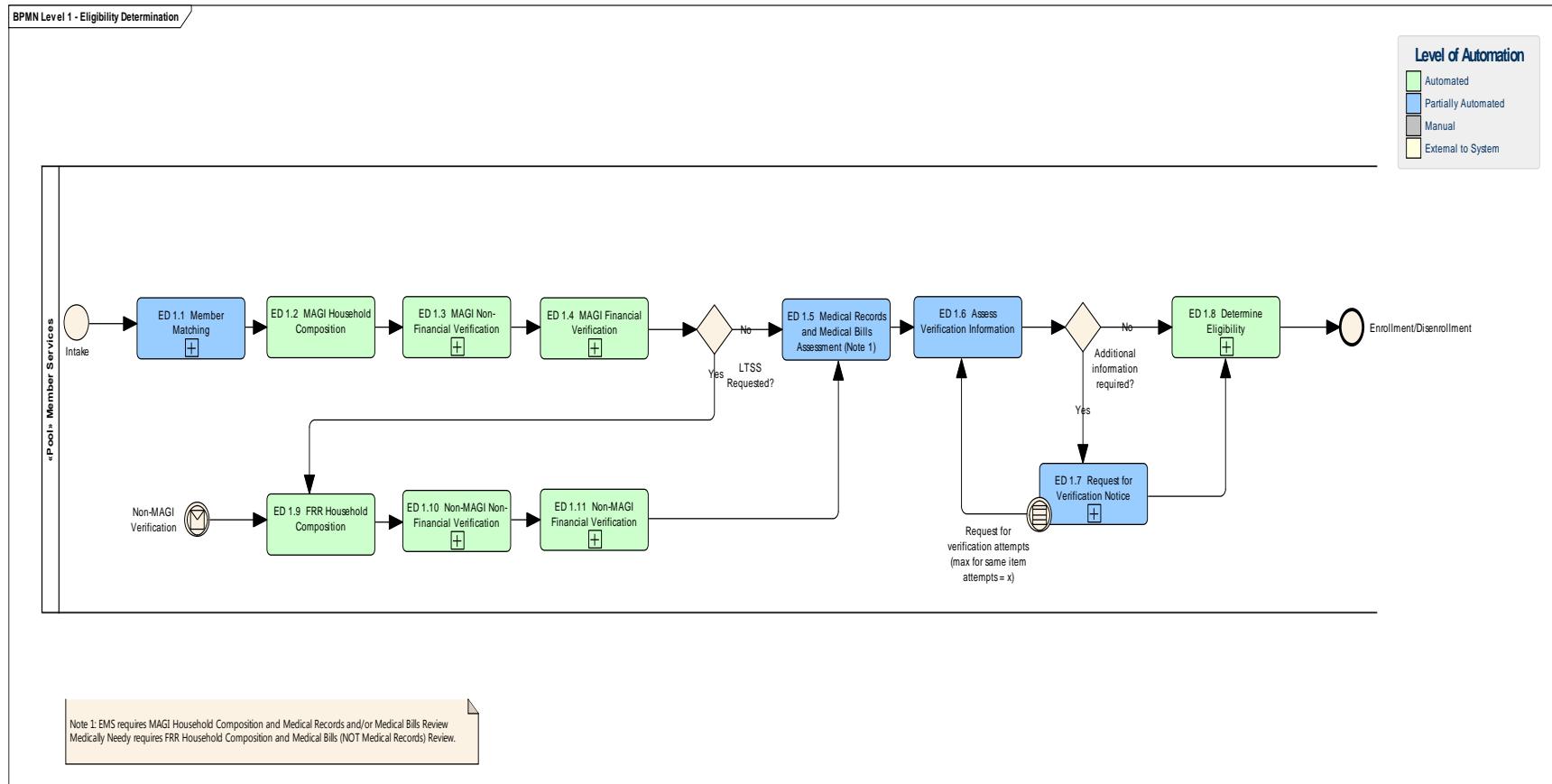


13.3 ELIGIBILITY DETERMINATION BUSINESS PROCESSES (LEVEL 1)

After completing Intake, TEDS processes applicant data to establish an eligibility result.

First, TEDS performs member matching, identifying potential matches. All applications proceed through the processes for a MAGI evaluation, composing for each applicant the relevant household members necessary to determine an applicant's eligibility, including performing both nonfinancial and financial verifications. If applicable to the application, medical records/bills are assessed. If applying for LTSS, then processes for a Financially Responsible Relatives (FRR) evaluation, including both nonfinancial and financial verifications, are performed. After rules-based verification outcomes are determined, the rules-based eligibility is determined.

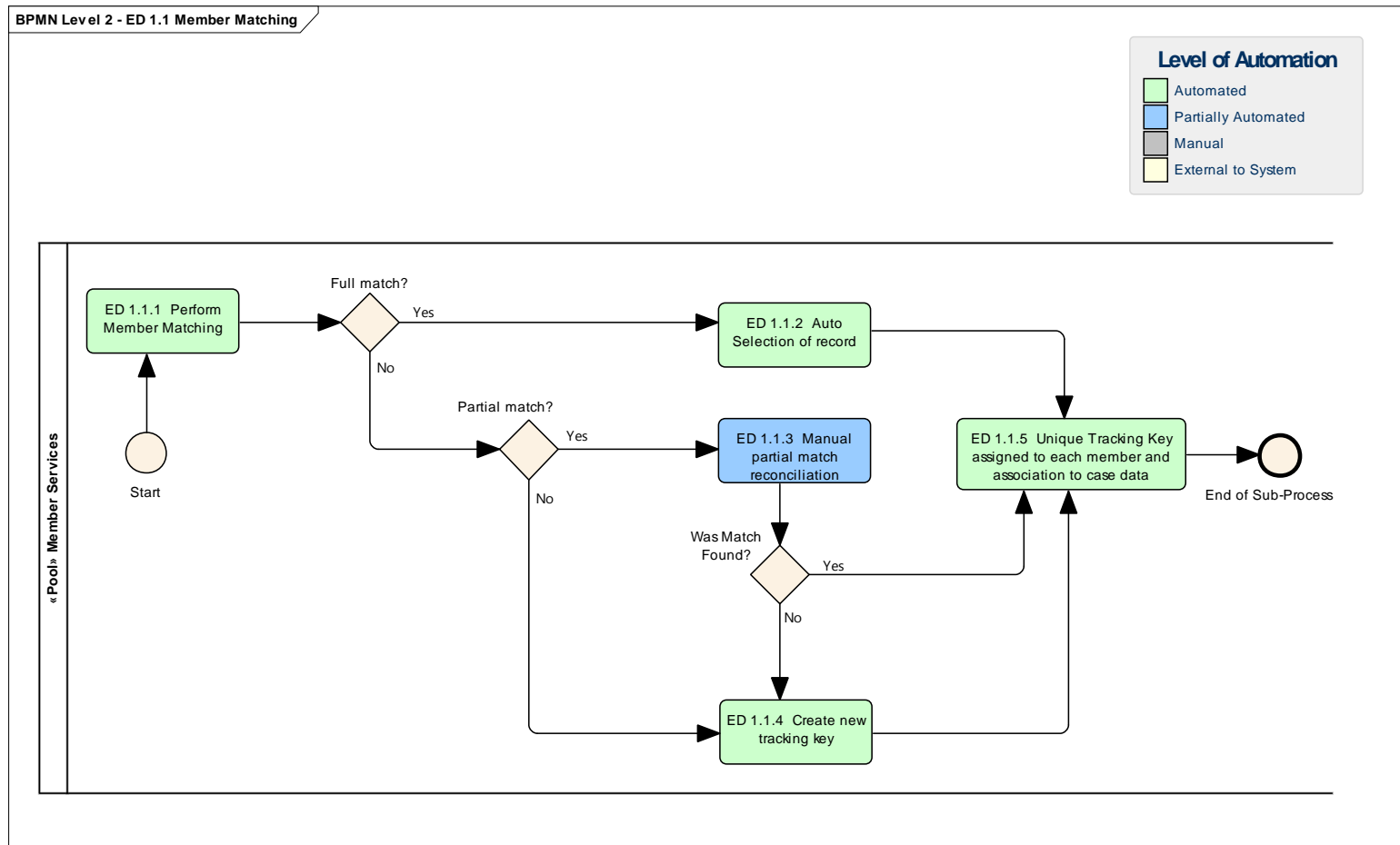
Figure 13-8 Eligibility Determination Business Process (Level 1)



13.3.1 Member Matching (Level 2)

TEDS performs member matching, identifying potential matches. Either an existing person is selected, or a new person record is created. When a full unique match results, the person's records are selected automatically. New persons are assigned a unique tracking key, and associated to case / application. Partial match results are assessed by a Member Services Worker prior to assigning a new key.

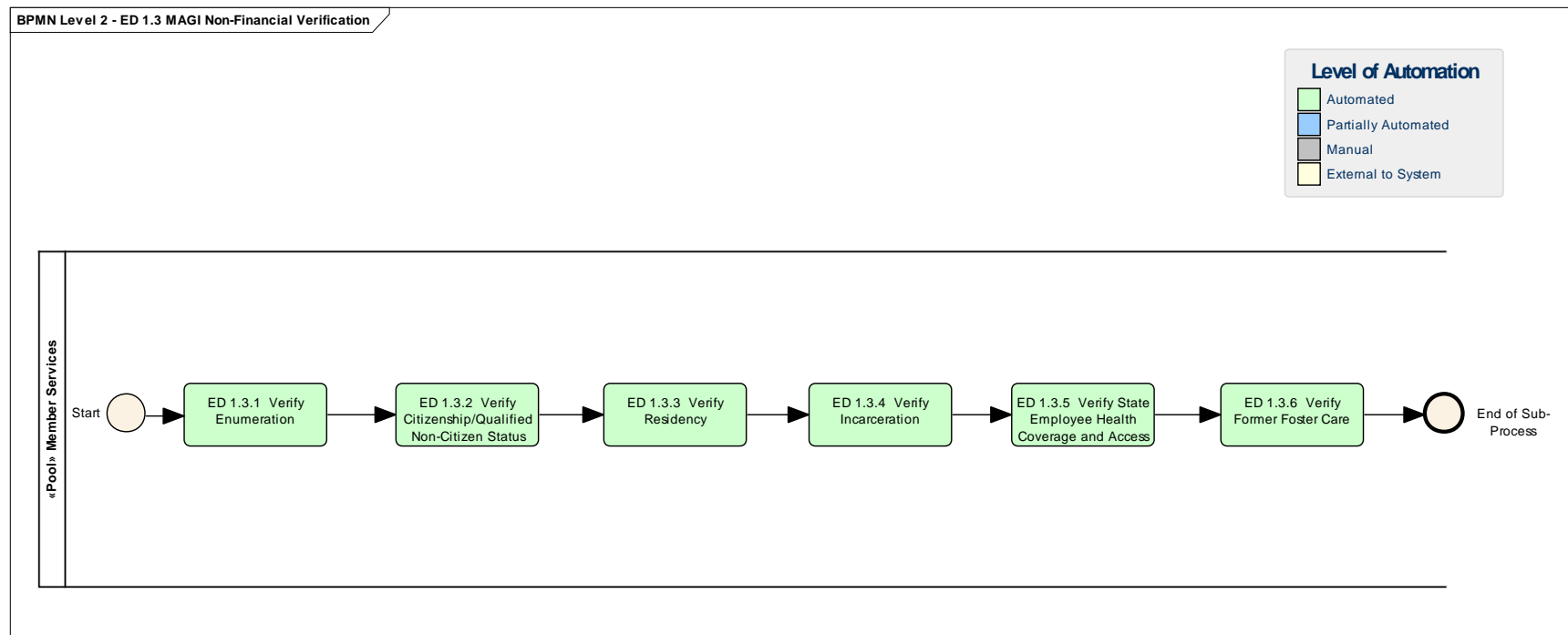
Figure 13-9 Member Matching Feature (Level 2)



13.3.2 MAGI Nonfinancial Verification (Level 2)

TEDS automatically contacts verification sources, automatically performing a rules-based verification assessment for applicant's SSN, birthdate, name, citizenship (or immigration status), state residency and incarceration. If appropriate for the application (rules-based), access to State employee health coverage is assessed and verification of former foster care are also performed. If appropriate to determine the applicant's eligibility, relevant household members have appropriate information (rules-based) verified.

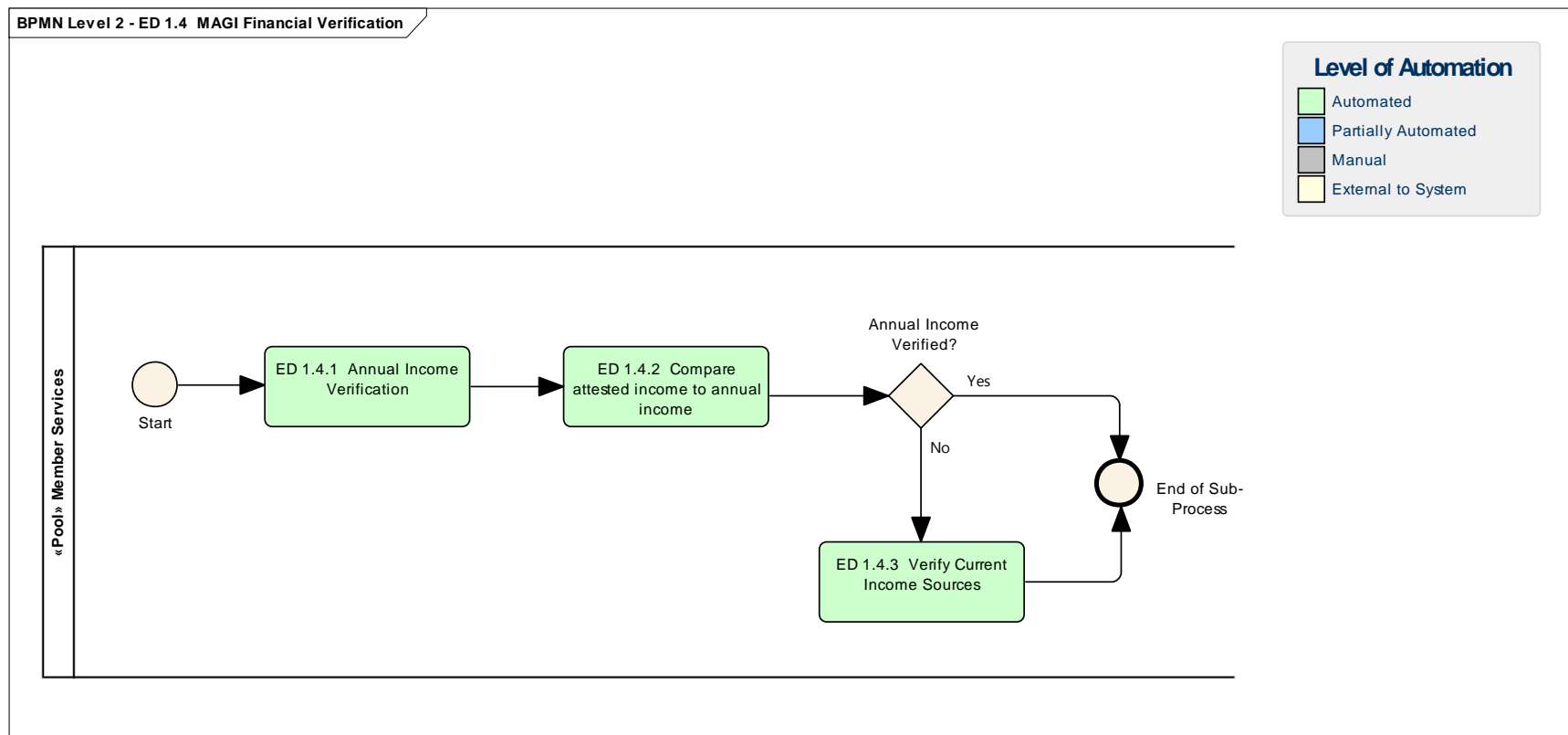
Figure 13-10 MAGI Nonfinancial Verifications (Level 2)



13.3.3 MAGI Financial Verification (Level 2)

TEDS automatically performs an evaluation to determine the reasonable compatibility of applicant's attested information to annual income financial verification sources. If appropriate to determine the applicant's eligibility (rules-based), relevant household members also have financial information verified. Based on rules outcome of the annual income verification result, an applicant's and/or relevant household members may also have their current income information verified.

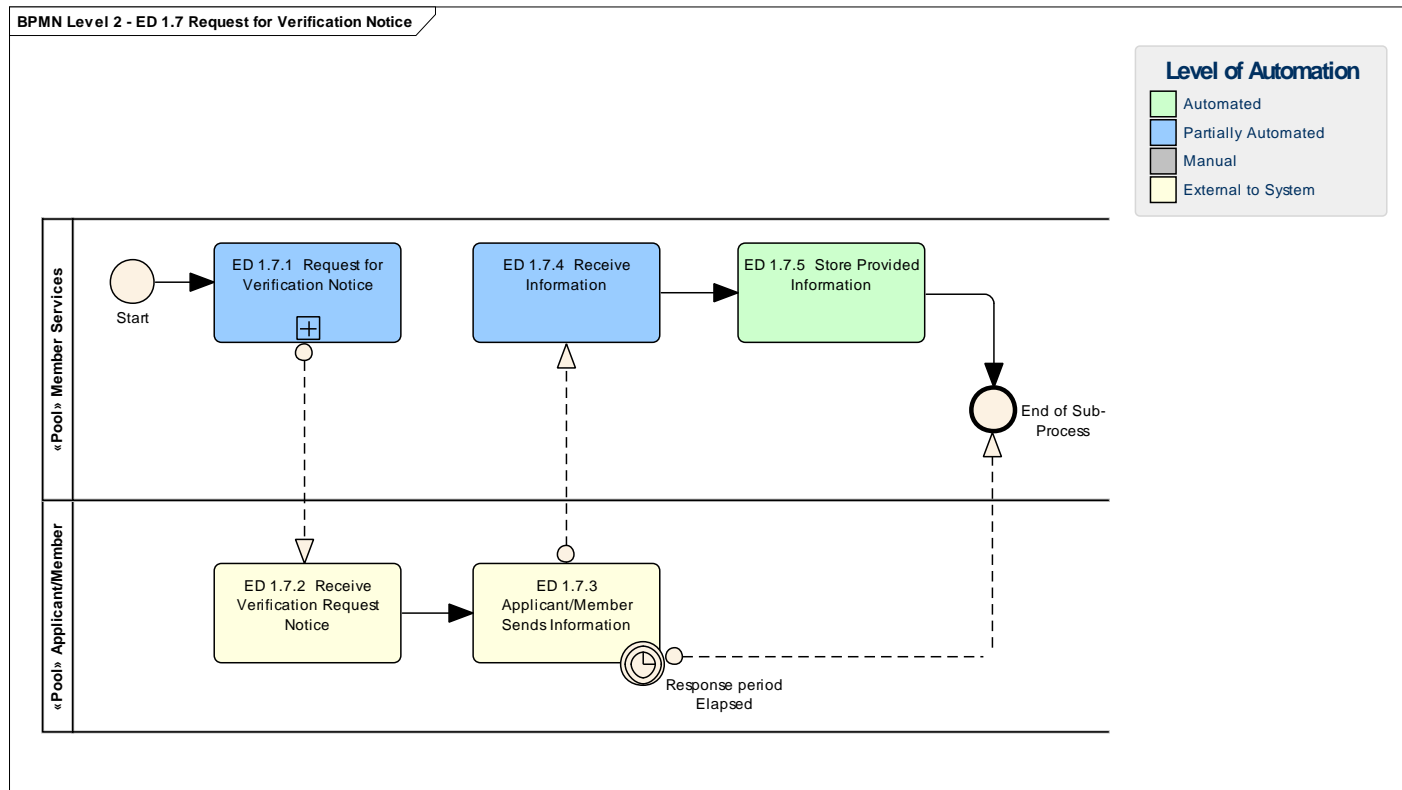
Figure 13-11 MAGI Financial Verifications (Level 2)



13.3.4 Request for Verification Notice (Level 2)

If any of the verification processes (financial or nonfinancial, MAGI/Non-MAGI/LTSS/MSP) result in an inconsistency (or multiple inconsistencies), then the applicant is contacted to resolve by providing proof documents.

Figure 13-12 Request Verification Proof from Applicant (Level 2)

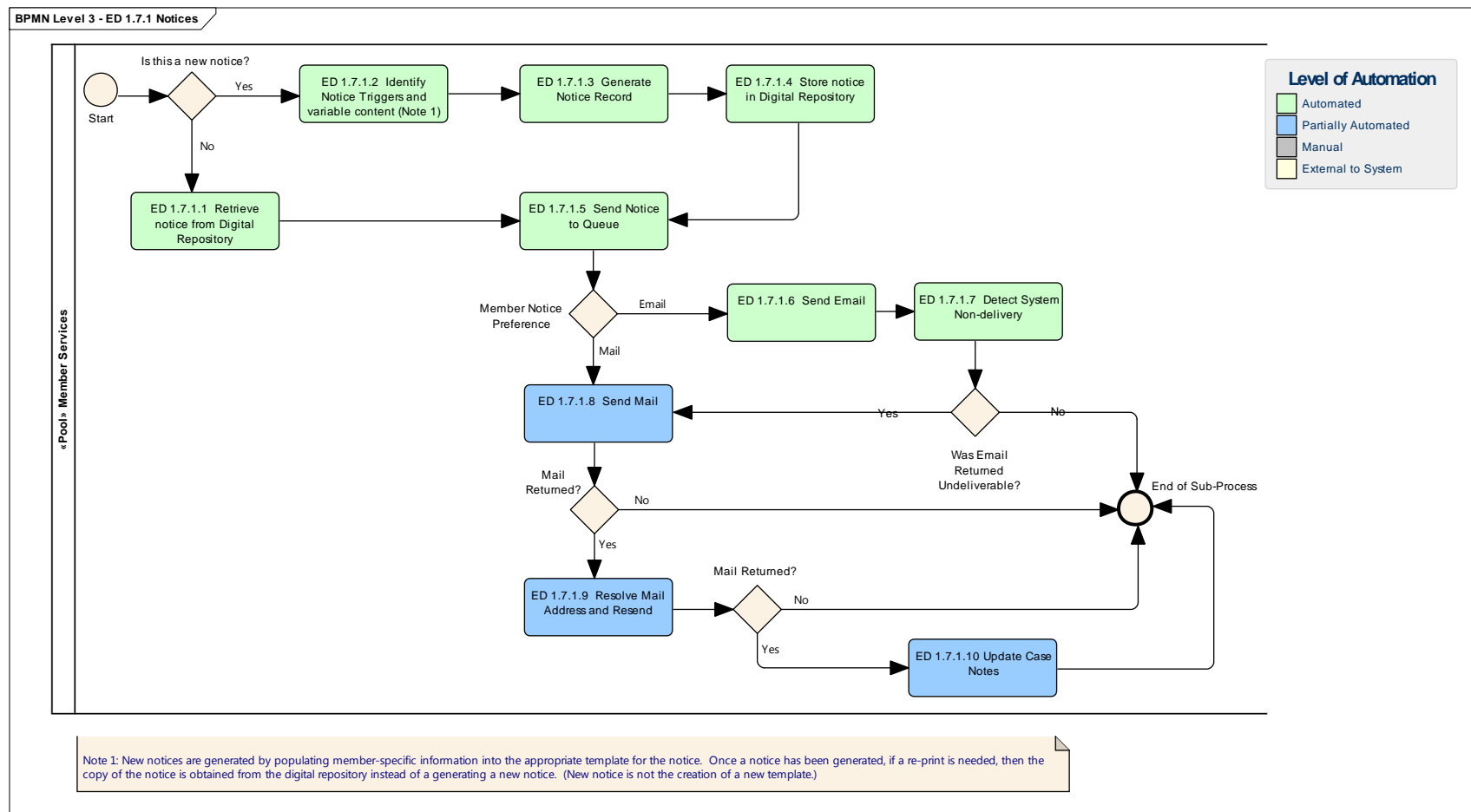


13.3.4.1 Notices (Level 3)

The Notices process is a general subprocess that may be used to communicate to the applicant for a variety of purposes, such as a request for more information, or to document the outcome of the eligibility determination.

- New notices are automatically generated with member-specific information and populated with variable content that is appropriate to the type of notice. This notice record is stored in the digital repository, which images the letter sent through the mass printing/mailing processes.
- The notice is sent based on the preference of the application filer, either through email or USPS mail. For email, if TEDS detects nondelivery then the notice is resent through USPS mail. If the USPS mail is returned, then workers are prompted to resolve the mailing address conflict, and the notice is resent. If the mail is returned after a second attempt, then the case notes are automatically updated.
- If the notice already exists in the digital repository, then the notice process automatically sends from the repository.

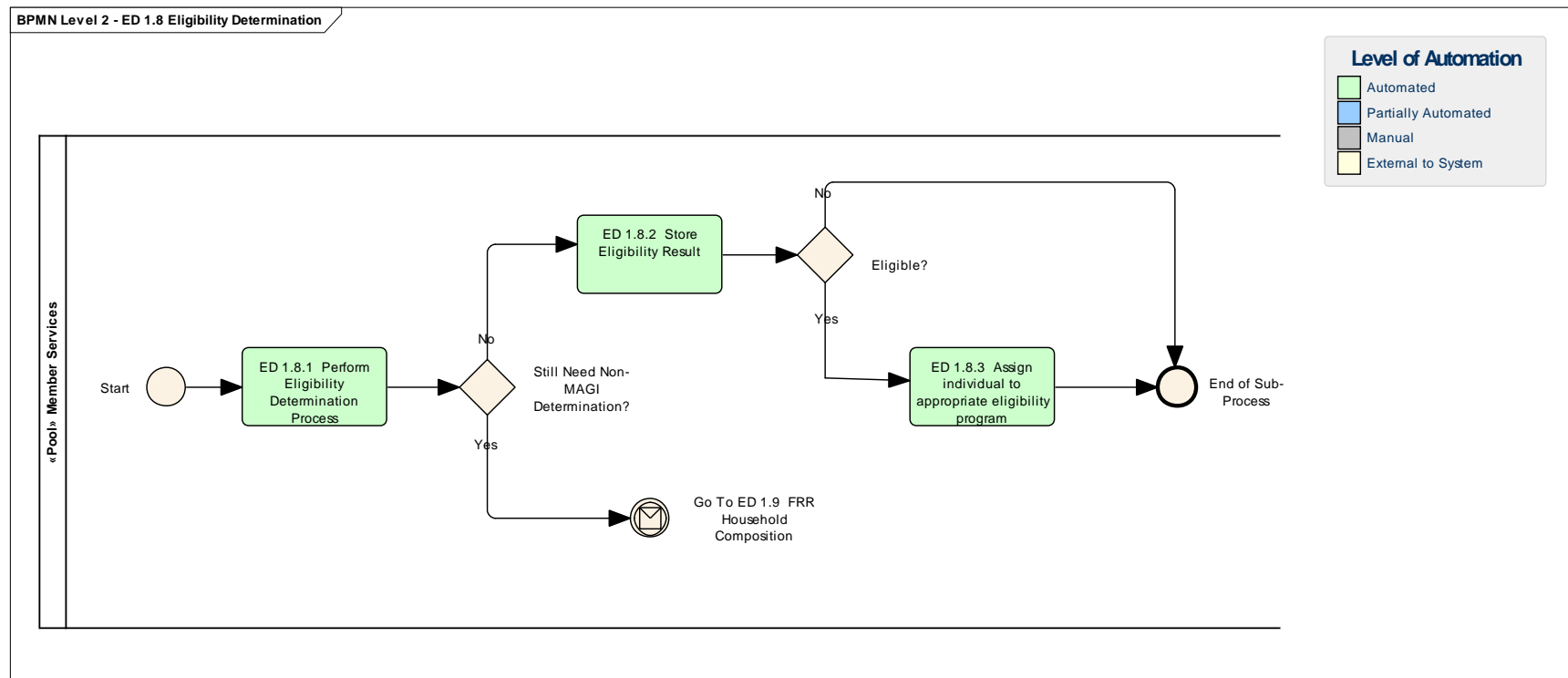
Figure 13-13 General Notices Flow (Subprocess for any type of notice) (Level 3)



13.3.5 Eligibility Determination (Level 2)

TEDS automatically performs, via a rules engine, the processing of an applicant's information to all healthcare categories. MAGI categories are assessed first. If the person is potentially eligible in other categories, then the process goes through the FRR verification and determination processes. Eligibility results are stored, so that TEDS is the system of record for eligibility. If an individual could be eligible in more than one category, then the rules engine performs a hierarchy evaluation to determine the most appropriate category of eligibility for the individual applicant.

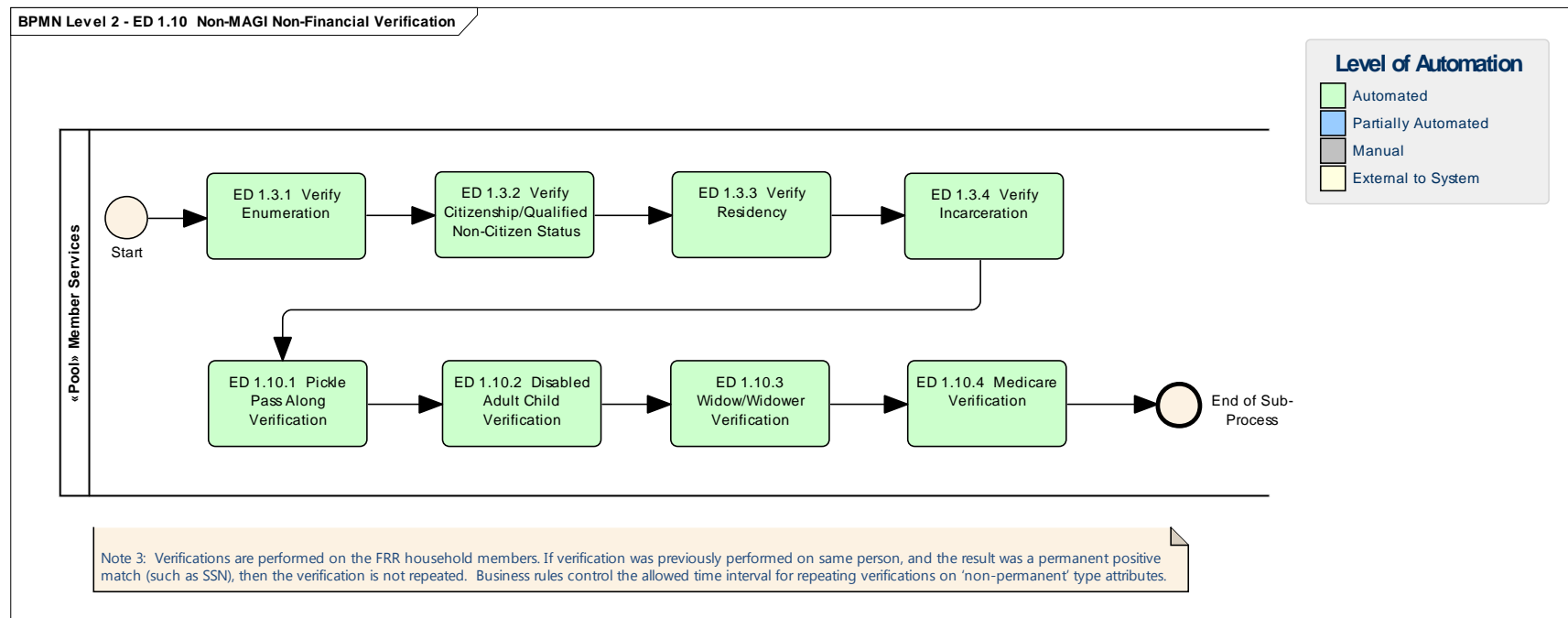
Figure 13-14 Process to Perform Eligibility Determination (Level 2)



13.3.6 Non-MAGI Nonfinancial Verification (Level 2)

TEDS automatically contacts verification sources, automatically performing a rules-based verification assessment. Because the FRR household composition may contain different persons than the MAGI household, the verification process also includes the same processes that were performed during MAGI processing. Rules prevent repeating specific verifications that have already been completed, based upon the time interval or type of verification completed. If applicable for the applicant's household (rules-based), the Non-MAGI nonfinancial applications also include Pickle Pass Along, Disabled Adult, Widow/Widower, and Medicare verifications.

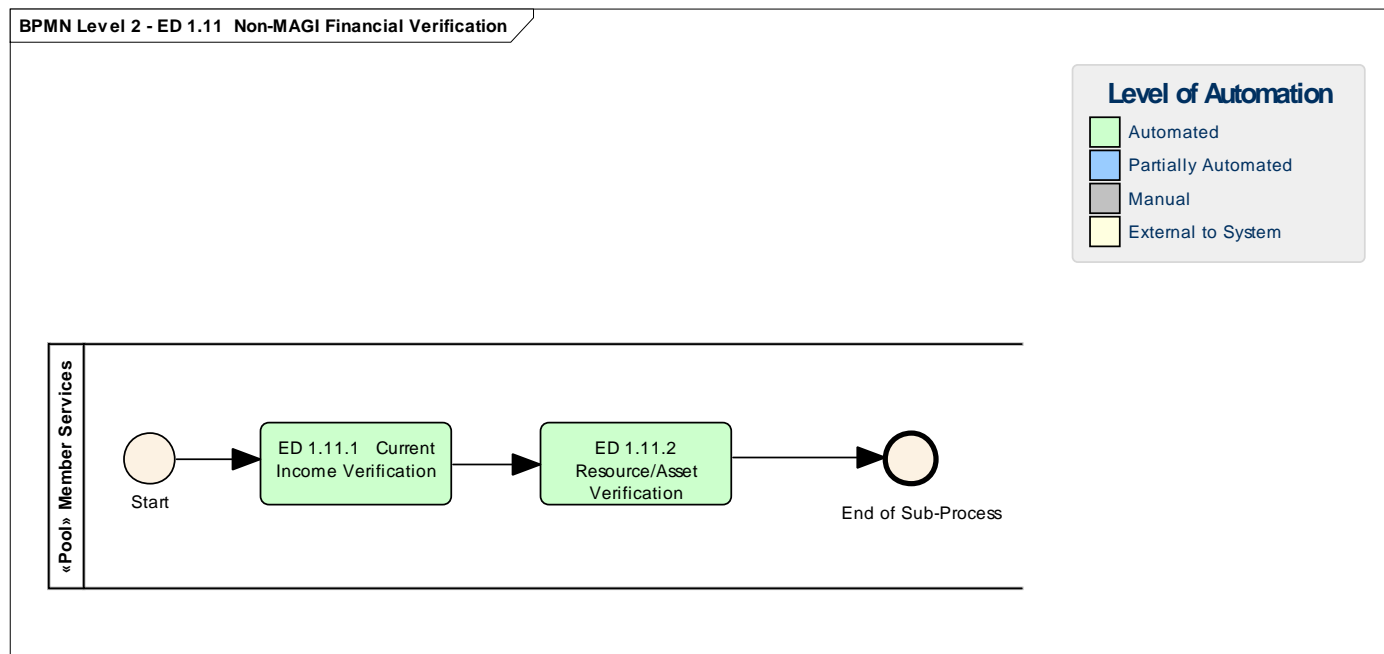
Figure 13-15 Non-MAGI Nonfinancial Verifications (Level 2)



13.3.7 Non-MAGI Financial Verification (Level 2)

TEDS automatically contacts financial verification sources, automatically performing a rules-based verification assessment. Since the FRR household composition may contain different persons than the MAGI household, the financial verification process may include the same Current Income verification process that was performed during MAGI processing. Rules prevent repeating specific verifications that have already been completed, based upon the time interval since the last current income verification. Resource/asset verification process is sequenced to occur after the Current Income process.

Figure 13-16 Non-MAGI Financial Verification (Level 2)

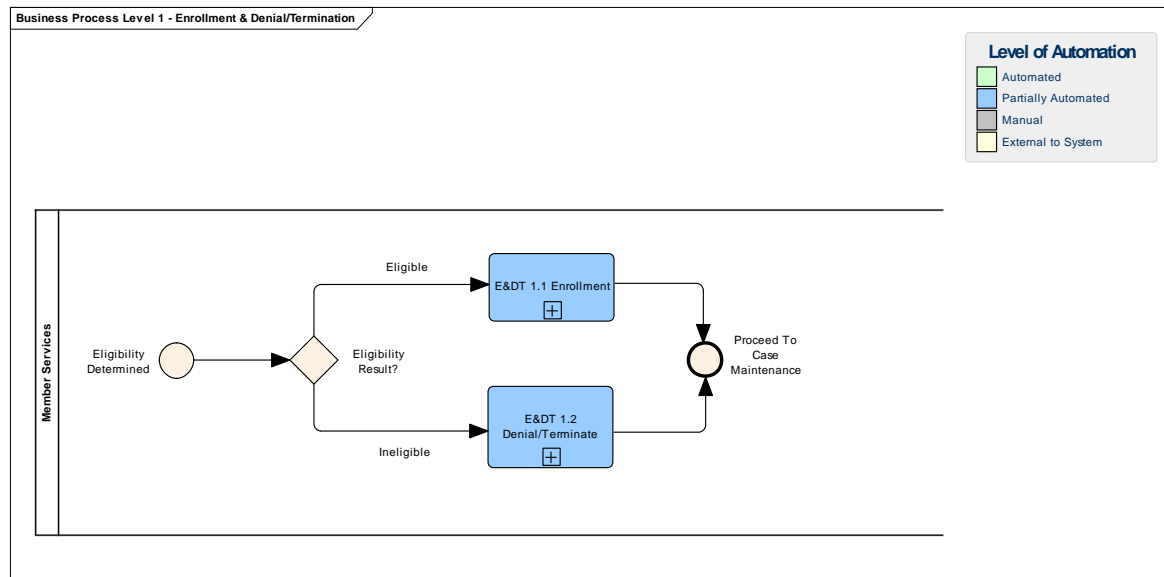


13.4 ENROLLMENT AND DENIAL/TERMINATION BUSINESS PROCESSES (LEVEL 1)

After storing the eligibility result, TEDS identifies eligible and ineligible applicants/members.

- Eligible applicants continue processing to enrollment, or have the enrollment of an existing member updated.
- Ineligible current members continue processing to have their enrollment terminated.
- All applicants (eligible and ineligible) will receive notices of their eligibility determination.
- A single application may complete processing while containing both eligible and ineligible applicants, as well as potentially applicants that have inconsistent applications (no determination).

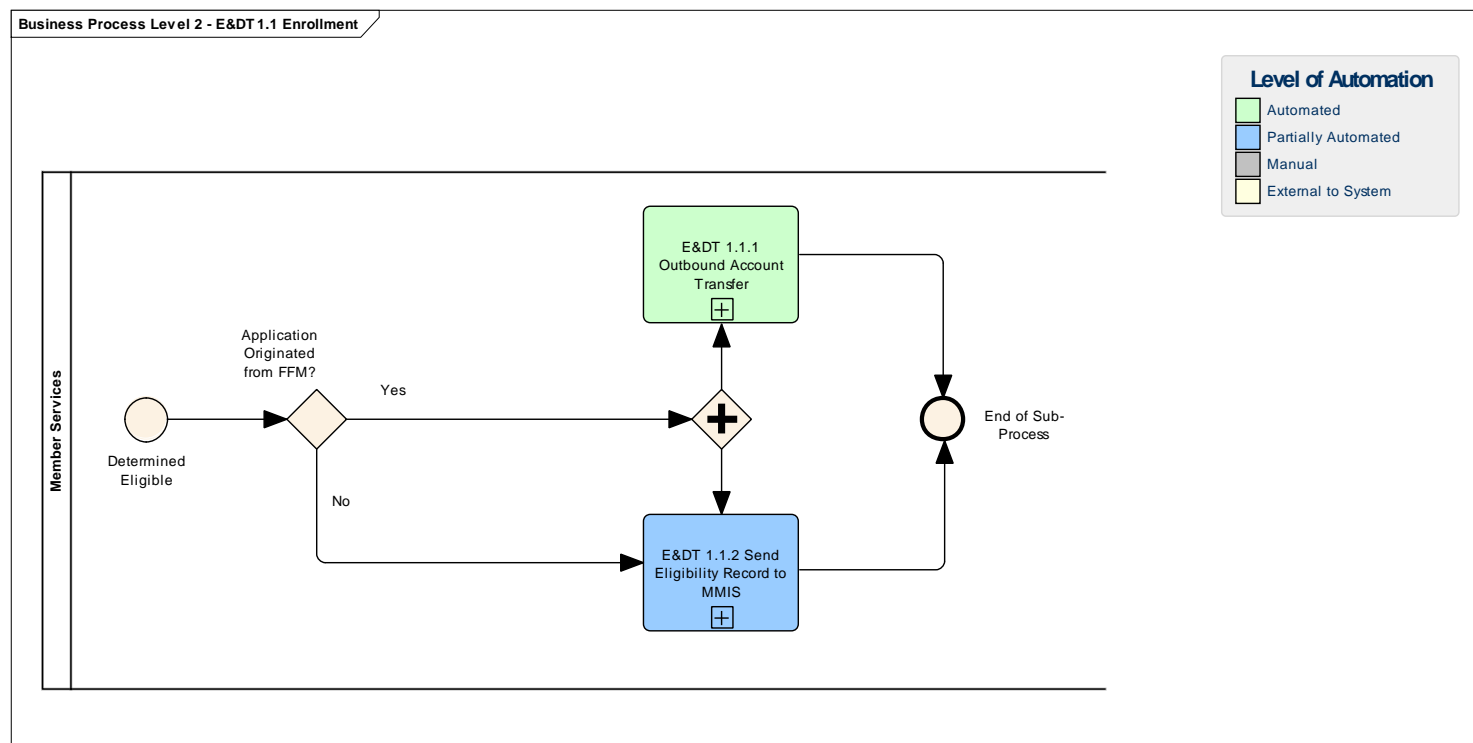
Figure 13-17 Business Process for Enrollment or Denial / Termination (Level 1)



13.4.1 Enrollment (Level 2)

For eligible applicants, the TEDS eligibility information is transferred to the iC system, which continues processing to initiate or update enrollment in one of the health care assistance programs. If the application originated from the FFM, then the information is also automatically account transferred to the FFM.

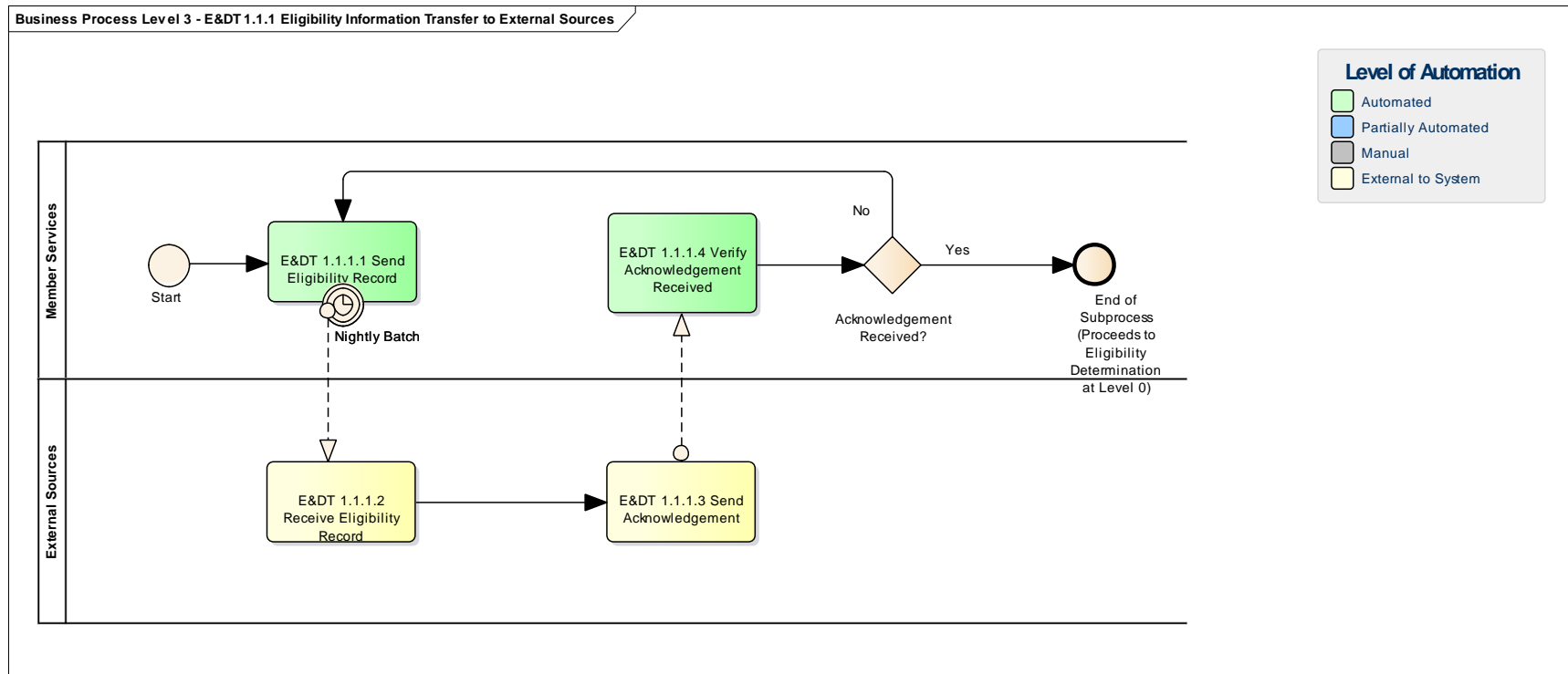
Figure 13-18 Enrollment Process (Level 2)



13.4.1.1 Eligibility Information Transfer to External Sources (Level 3)

The common automatic process for transferring eligibility information is used whenever the applicant's eligibility record is transferred from TEDS to an external system, such as the FFM. The transaction receives an acknowledgement to confirm successful transmittal.

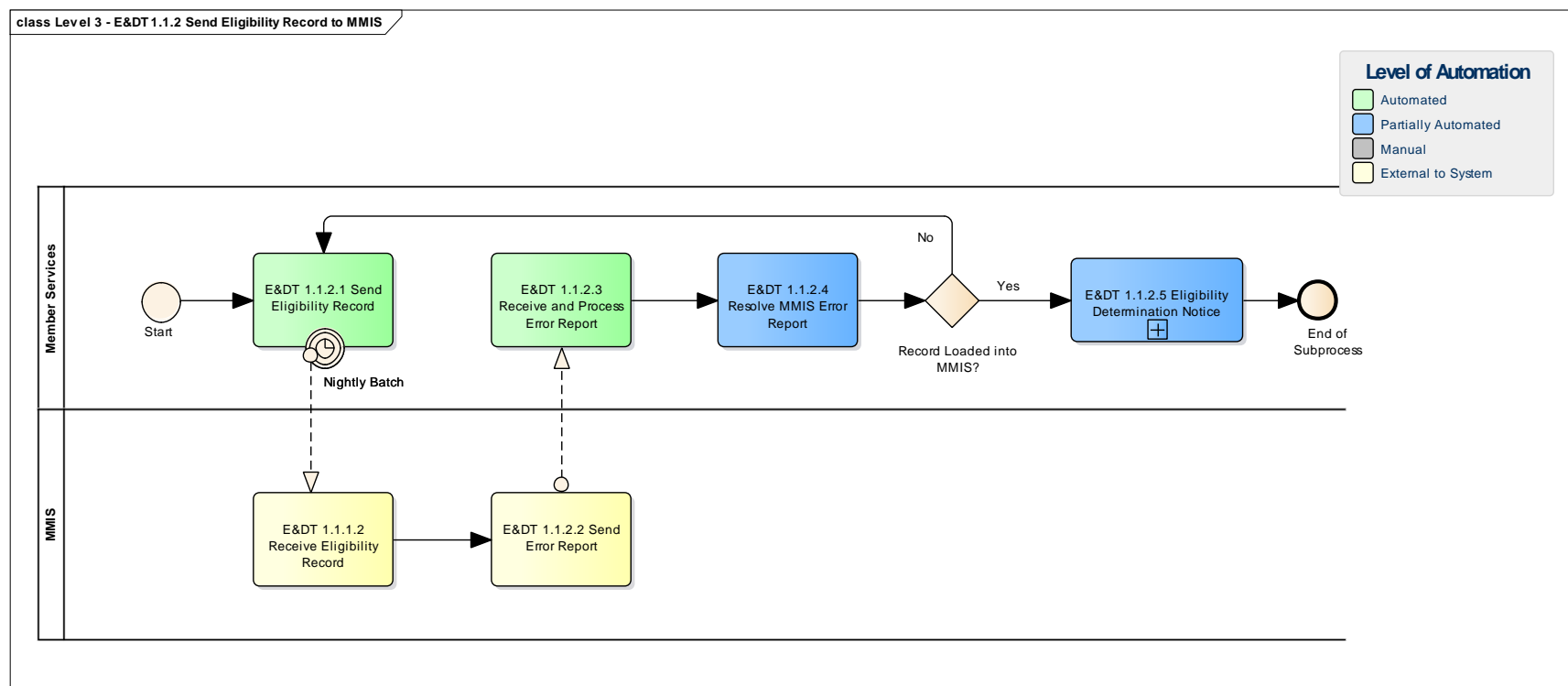
Figure 13-19 Process to Transfer Information to External Sources (Level 3)



13.4.1.2 Send Eligibility Record to MMIS (Level 3)

The automatic process for transferring eligibility information is used whenever the applicant's eligibility record is transferred from TEDS to iC, the MMIS enrollment system of record. It is used for both eligible and ineligible applicant outcomes. The transaction receives an acknowledgement to confirm successful transmittal. TEDS generates a notice to communicate to the applicant after successful transmittal of eligibility record to MMIS.

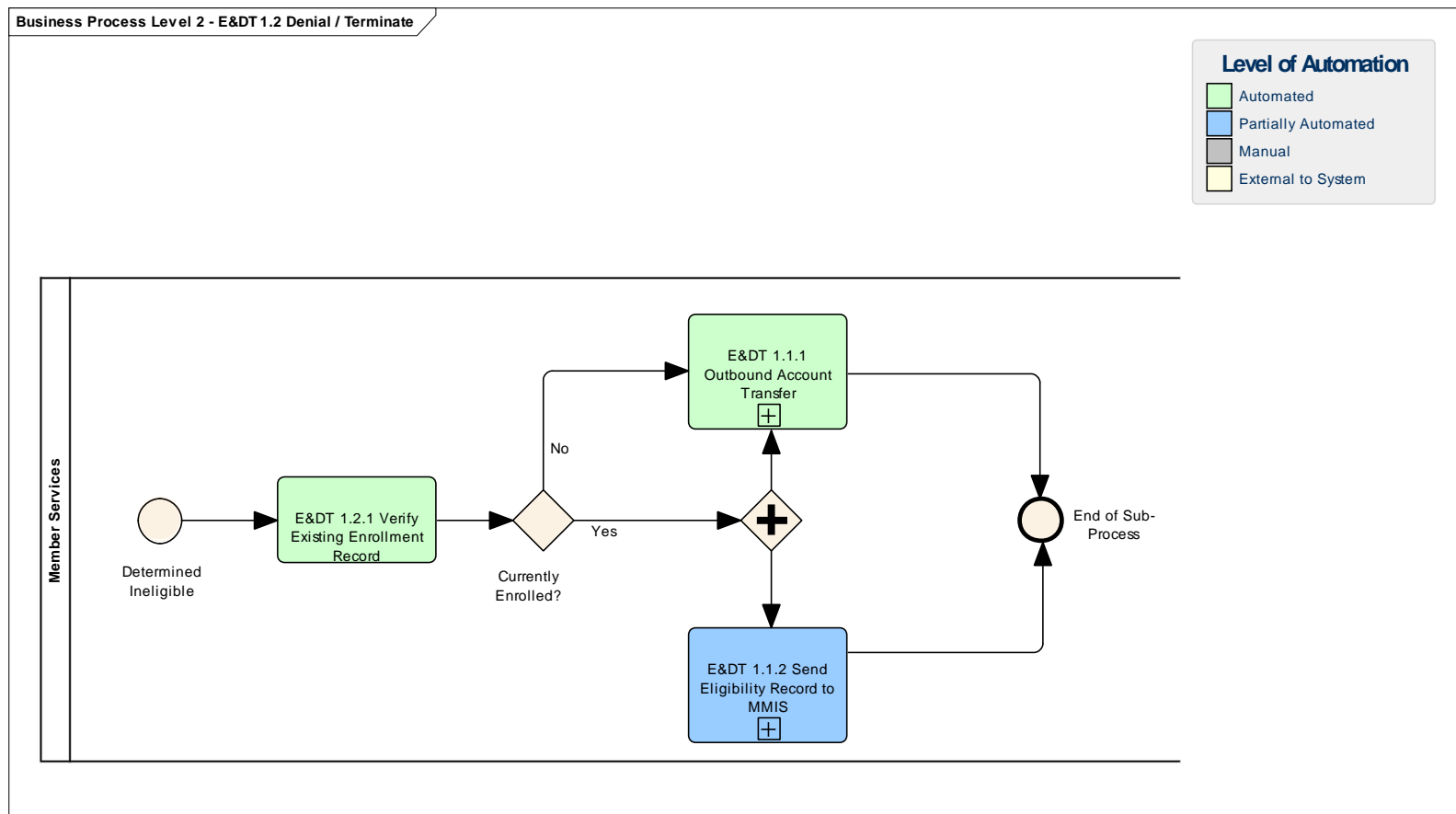
Figure 13-20 Process to Transfer Eligibility Record to MMIS (Level 3)



13.4.2 Denial/Terminate (Level 2)

For ineligible applicants, TEDS automatically verifies the applicant's current enrollment record. If the applicant is currently enrolled as a member, the TEDS will send the eligibility record on to MMIS when it sends an outbound transfer to the FFM so that the member's existing enrollment can be terminated. The outbound transfer to the FFM occurs whether the application originated from an FFM intake channel or one of the other TEDS intake channels.

Figure 13-21 Process for Denial or Termination (Level 2)

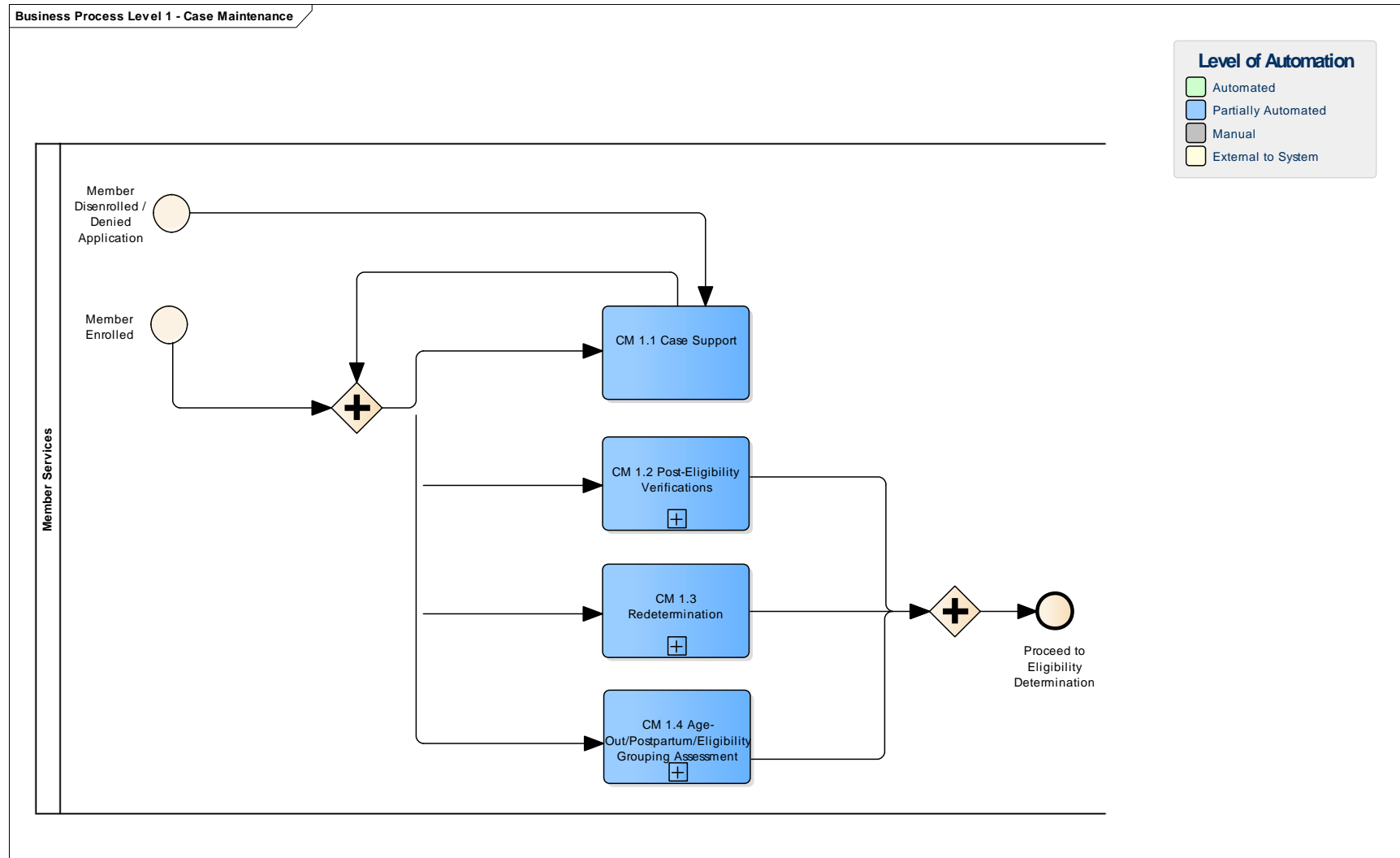


13.5 CASE MAINTENANCE BUSINESS PROCESSES (LEVEL 1)

After eligibility has been initially determined, then the case may be affected by changes over time. Different case maintenance processes may occur concurrently, but are independent. Case maintenance includes:

- Case Support for changes such as telephone contact, which do not affect eligibility, and are applicable to applicants with both eligible and ineligible outcomes.
- Post eligibility verifications, for monitoring the circumstances of enrolled members regarding receiving benefits in other states, etc.
- Redetermination, an annual process for collecting current financial information and applicable nonfinancial circumstances,
- Changes that are driven by calendar, such as applicant aging out of a category, or aid category program-specific conditions, such as a pregnancy ending.

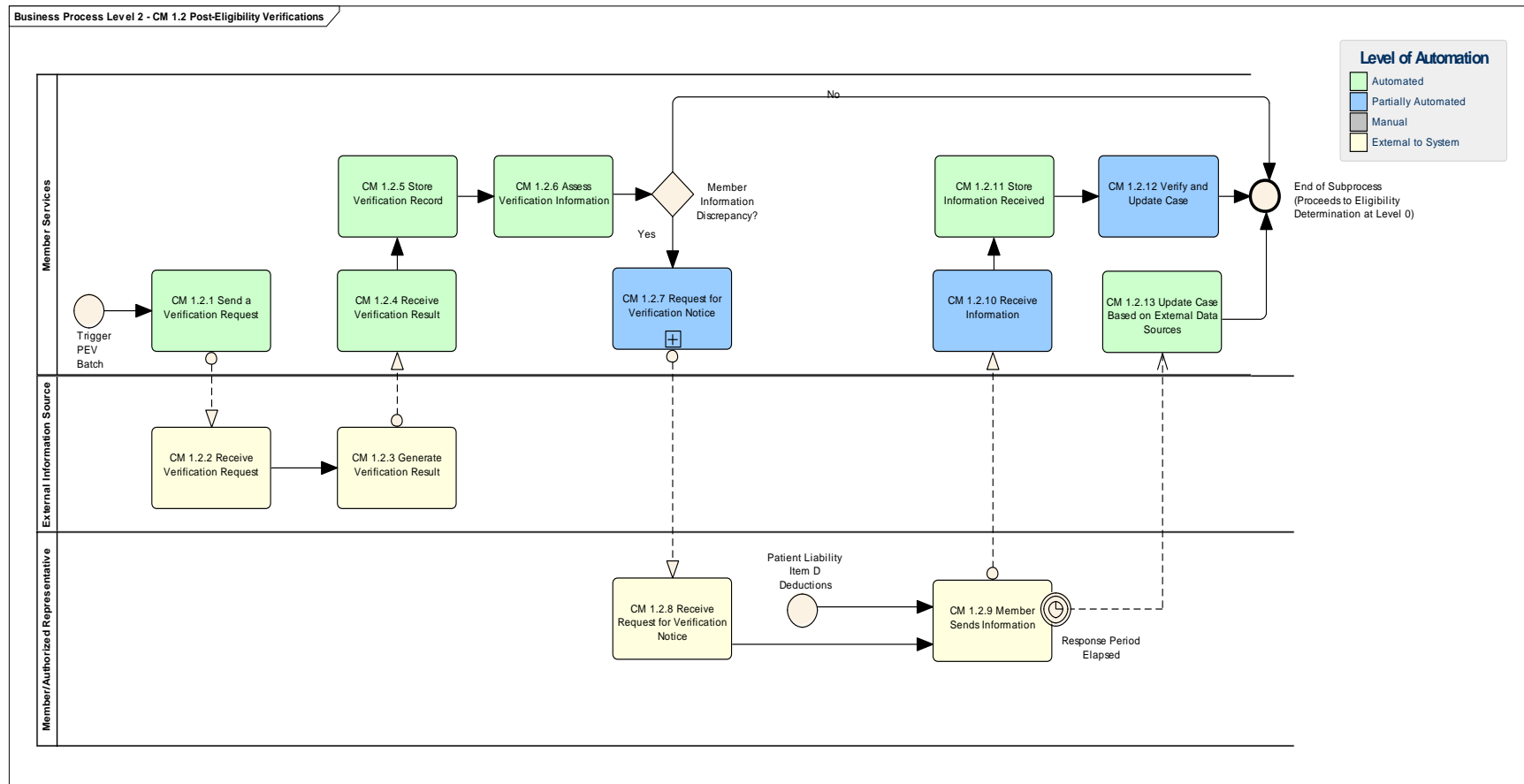
Figure 13-22 Case Maintenance Business Processes (Level 1)



13.5.1 Posteligibility Verifications (Level 2)

Posteligibility verifications are performed after a member has already been determined as eligible. To maintain benefits, information is periodically checked against external databases to assure continuing eligibility. If the member's attested application information is different from the information obtained from external data sources, then the member is contacted to resolve the discrepancy.

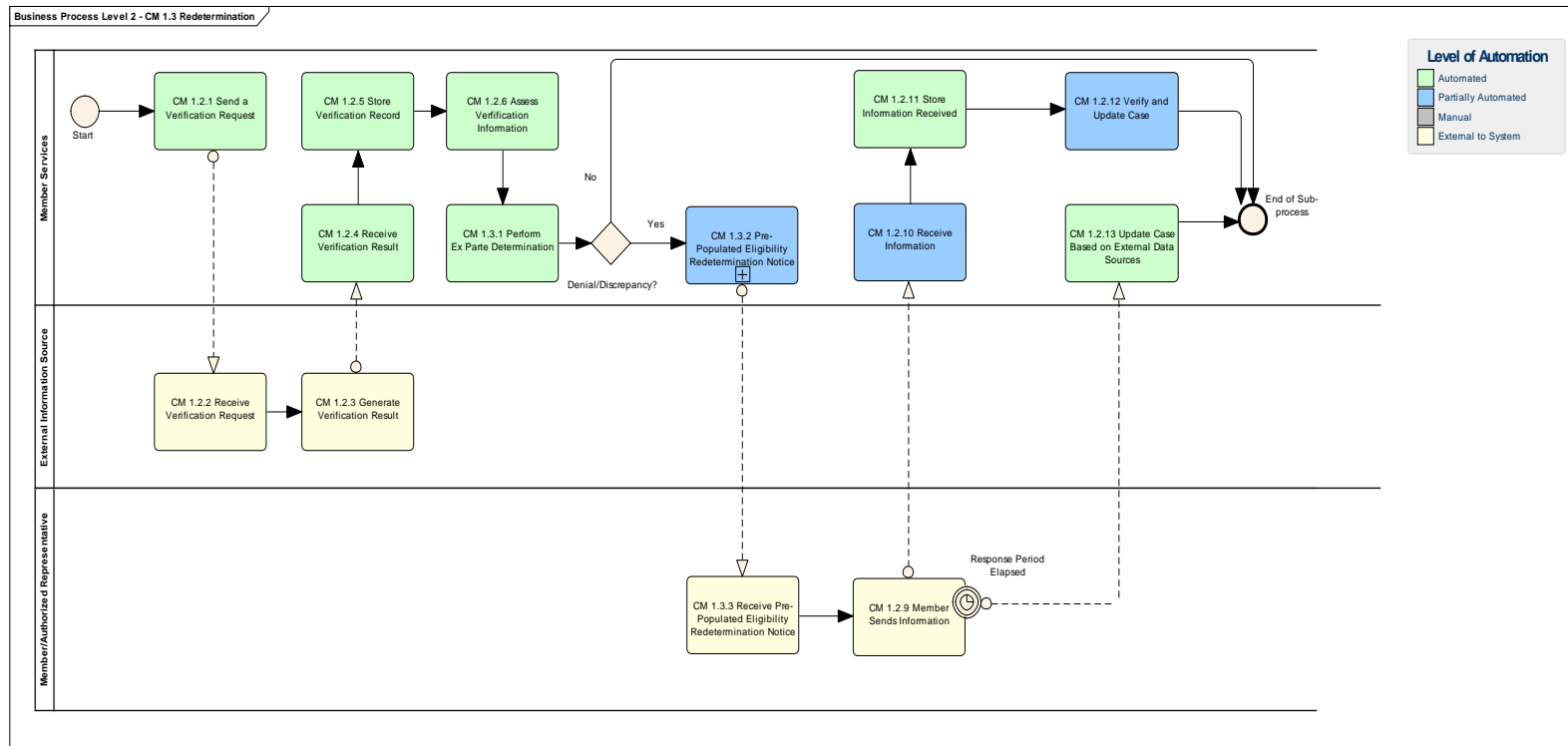
Figure 13-23 Posteligibility Verification Processes (Level 2)



13.5.2 Redetermination (Level 2)

On a periodic basis, as regulated by State and Federal policy (nominally annually), the member's application data is verified against updated (more current) verification sources. Data that does not change (such as identity and citizenship) is not reverified. If the outcome of reverification would result in a denial of benefits (based upon the latest verification information) or is discrepant with the member's application data, then the member is contacted to provide information. To assist the member in the process, an application form is provided with prepopulated information from the member's existing application record. If the member responds, their information is submitted and is used to determine the member's eligibility. If the member does not respond, then the process continues to eligibility determination, using the information obtained from the verification sources.

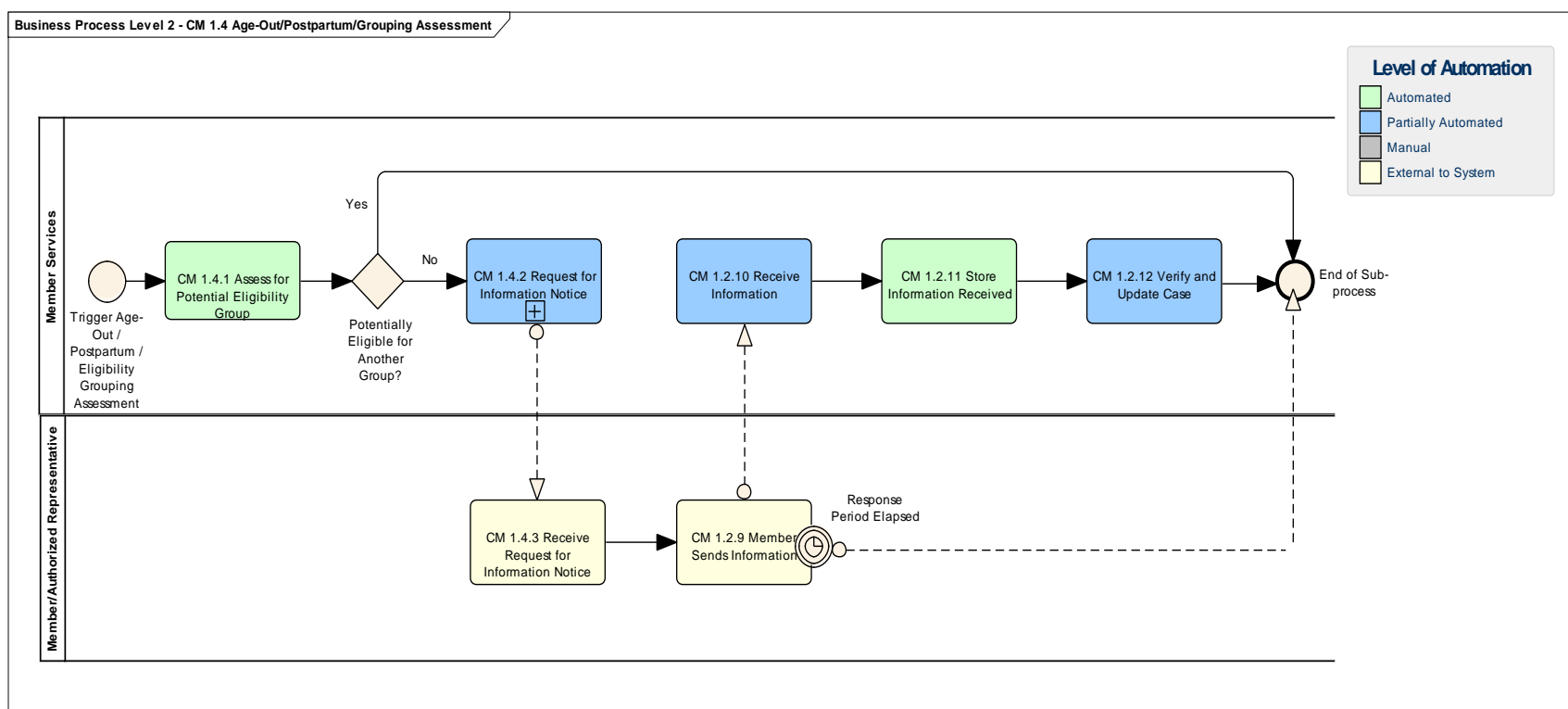
Figure 13-24 Redetermination Process (Level 2)



13.5.3 Age-out/Postpartum/Grouping Assessment (Level 2)

Triggered by calendar and category of aid-specific conditions, the member's application data is updated to assess eligibility based upon current age or current category-related conditions, such as pregnancy. If the member is not potentially eligible for another category of aid, then the member is sent a request for additional information regarding current circumstances. If the member responds and provides information (such as "is pregnant again"), then the updated information is stored and used to determine eligibility. If the member does not respond, eligibility is redetermined based upon the specific triggering event and the existing application data.

Figure 13-25 Age-out/Postpartum/Grouping Assessment Process (Level 2)

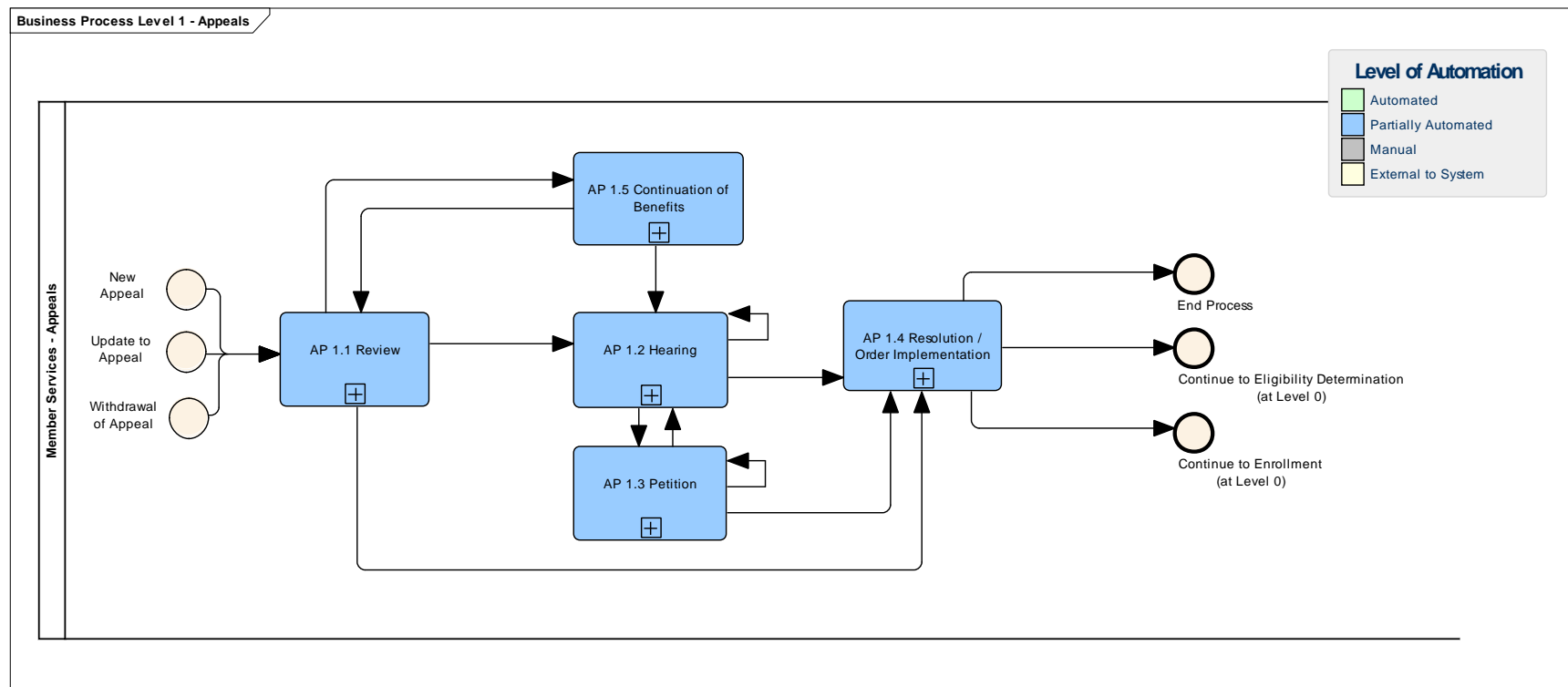


13.6 APPEALS BUSINESS PROCESSES (LEVEL 1)

13.6.1 Appeals (Level 1)

Appeals work processes may be triggered by filing a new appeal, updating the information of an open appeal, or withdrawing an appeal. Appeals can be filed if an individual has not timely received an eligibility determination, or if they have been determined ineligible or have been determined eligible but are appealing another aspect of enrollment, such as the benefit start date or category of aid. After the appeals work processes are complete, the individual's process may end if the appeal results in no change, or may continue to eligibility determination and/or enrollment if changes are to be implemented.

Figure 13-26 Appeals Business Process (Level 1)

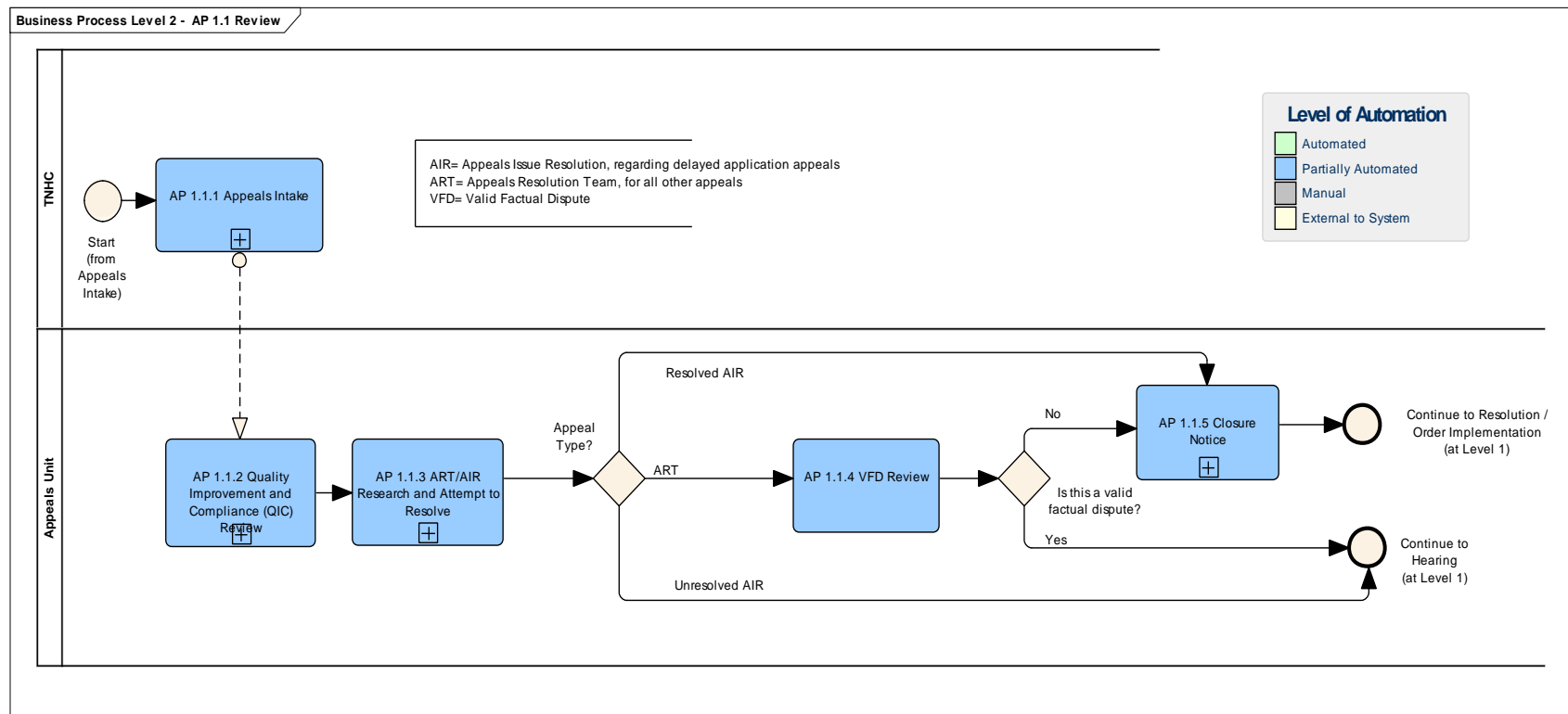


13.6.2 Appeals Review (Level 2)

The Appeals Review process flow is a series of tasks to receive appeal information, associate to relevant case and application, compare to relevant data sources, and determine whether or not the appellant has a valid factual dispute. Certain work processes are specific to delayed application eligibility determination processing.

- If the appellant does not have a valid factual dispute, then the appeal process branches to closure, notifying the individual of the appeal outcome and continuing to implementation processes.
- If the appellant does have a valid factual dispute, then the appeal process branches to continue to a hearing.

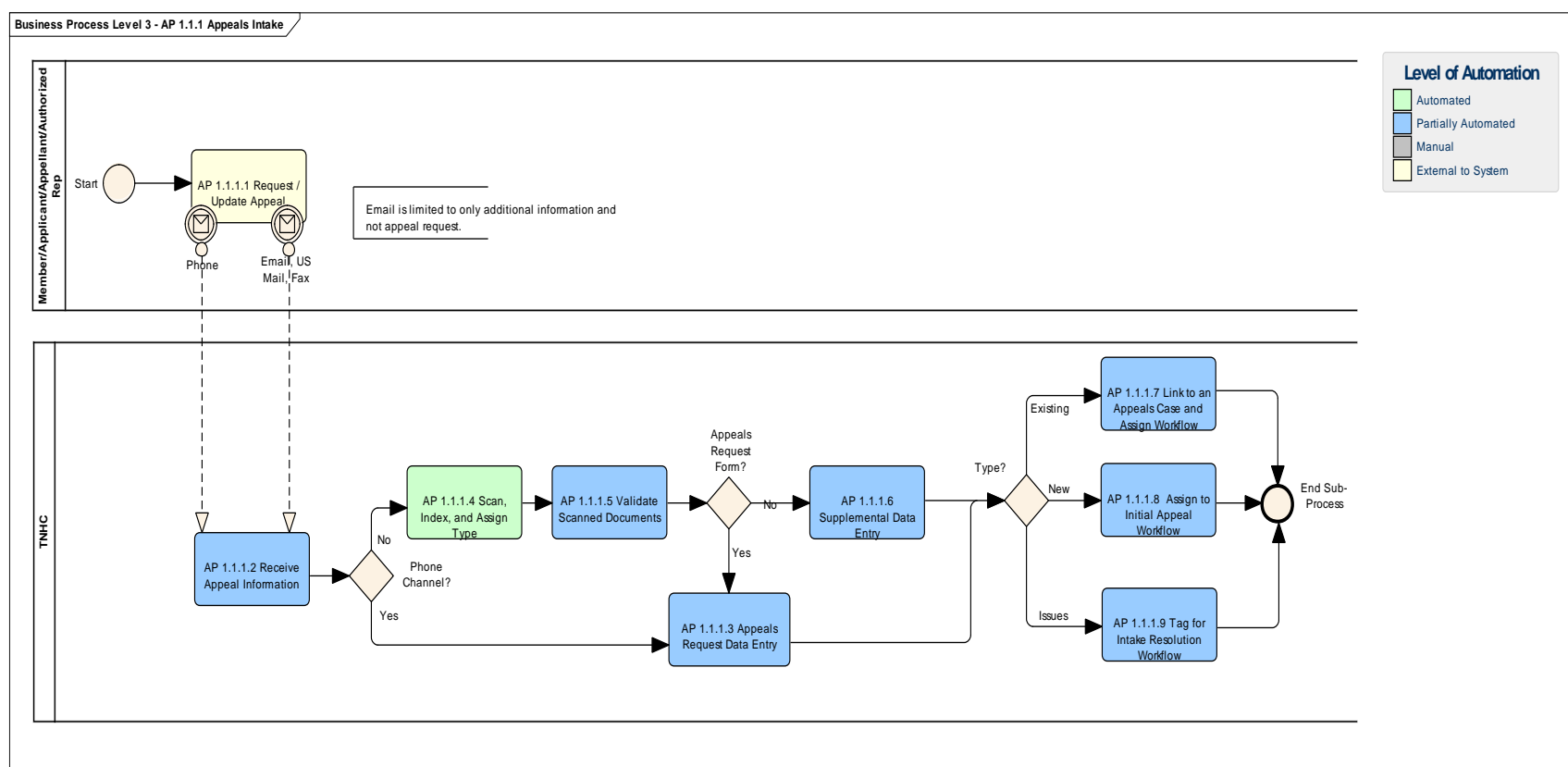
Figure 13-27 Appeals Review Process (Level 1)



13.6.2.1 Appeals Intake (Level 3)

The Appeals process begins by receiving an appeals request via phone, USPS mail, or fax channels. The email channel is used only to intake additional information on an existing open appeal. The Centralized Contact Center receives the appeal information, scans the document, and uses automated processes to extract data from the document. Workers review the data collection with the scanned document, validating for accurate data entry and providing manual supplemental data entry as necessary. The document is either associated to a new appeal, an existing appeals case or identified as requiring manual intervention to resolve data entry intake issues.

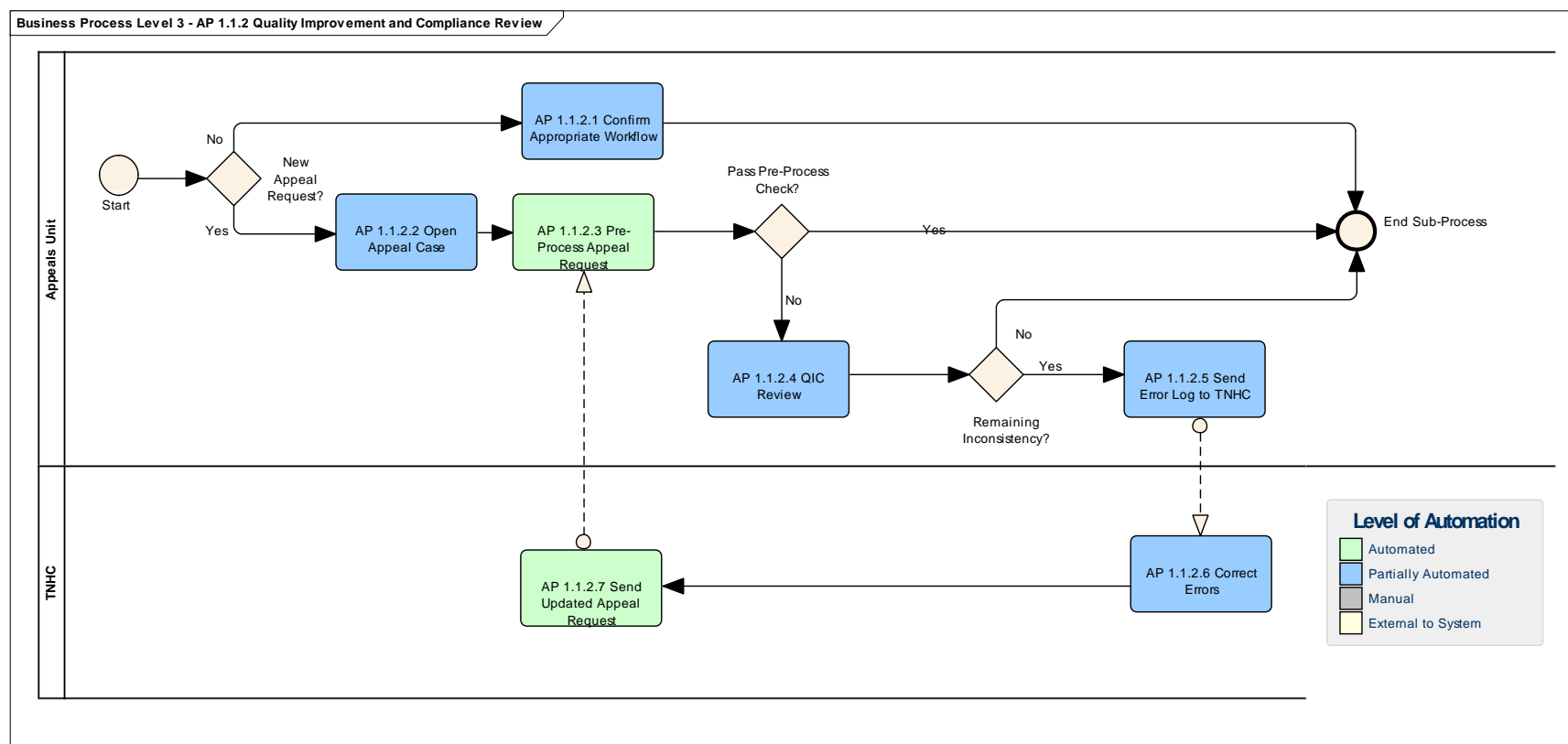
Figure 13-28 Appeals Intake Process (Level 3)



13.6.2.2 Quality Improvement and Compliance (QIC) Review (Level 3)

The QIC activity reviews the intake and confirms the assignment to an appropriate workflow, such as review of submitted verification proof documentation, or routing of legal documents into case review. Accurate associations to case and applications are confirmed. If the intake is a new appeal request, then the QIC task opens the appeal case. This triggers a fully automatic preprocessing, using rules to perform a preliminary assessment of the submitted appeal information. If the information is complete, appropriate, and has no obvious inaccuracies, then it continues into appeals review processing. Otherwise, it undergoes additional review, which may result in requesting the intake process to correct data entry or contact the appellant to confirm information or obtain additional information.

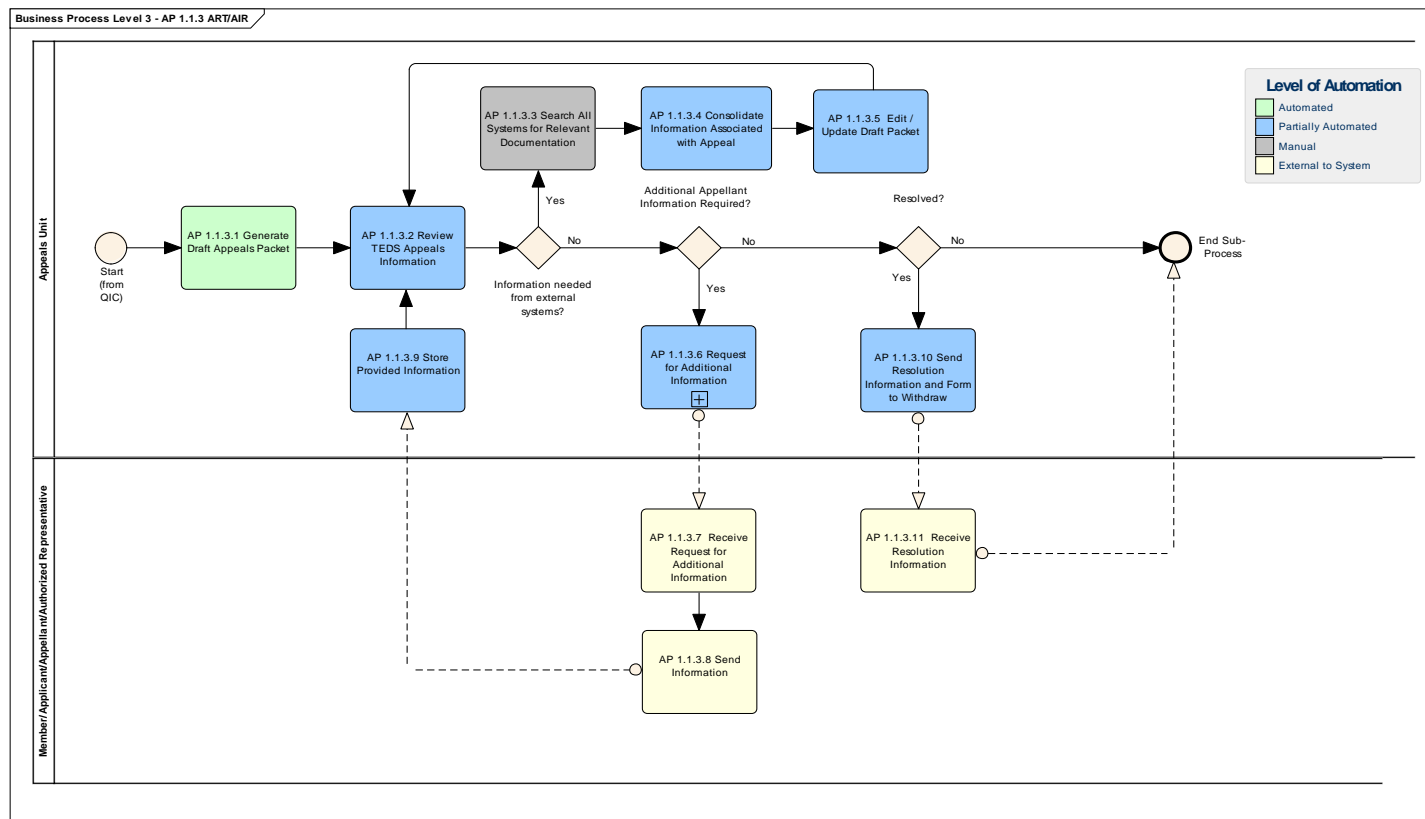
Figure 13-29 Quality Improvement and Compliance Review Process (Level 3)



13.6.2.3 Appeals Resolution Team (ART)/Appeals Issue Resolution (AIR) (Level 3)

Completing the QIC process triggers a fully automatic process, which pulls relevant data stored in TEDS into an appeals-friendly data summary review package. Information is reviewed, and if necessary a search of data sources outside of TEDS is also conducted, consolidating information into the appeal. If necessary, the appellant is contacted to request additional information, which is received and reviewed. If the information collected is sufficient to resolve the appeal, then the appellant is contacted. After reviewing the information with the appellant, the appellant may choose to withdraw their appeal.

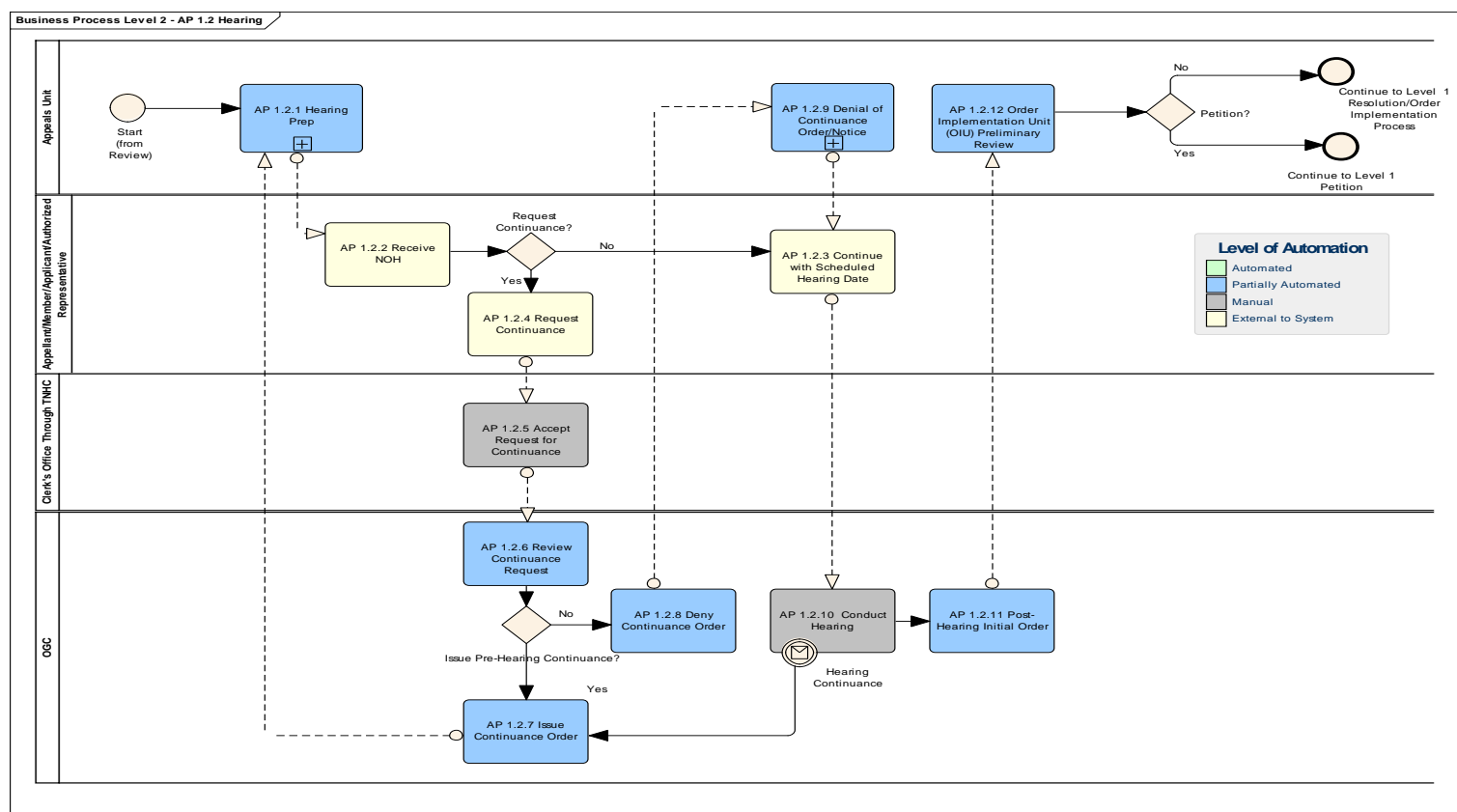
Figure 13-30 ART / AIR (Level 3)



13.6.3 Hearing (Level 2)

The appeal enters the hearing process after the appeals request has completed a review that resulted in a finding of a valid factual dispute. This is a series of activities to prepare case information and to schedule and conduct an administrative judicial process. The hearing process may result in a single hearing, a series of continuances for additional hearings and/or requests to reschedule hearing events after sending a Notice of Hearing (NOH). When a hearing is conducted, the results are documented in a judicial order, which is undergoes a preliminary review to assure that court orders are fully and accurately documented, to provide a disposition for all relevant applicant household members.

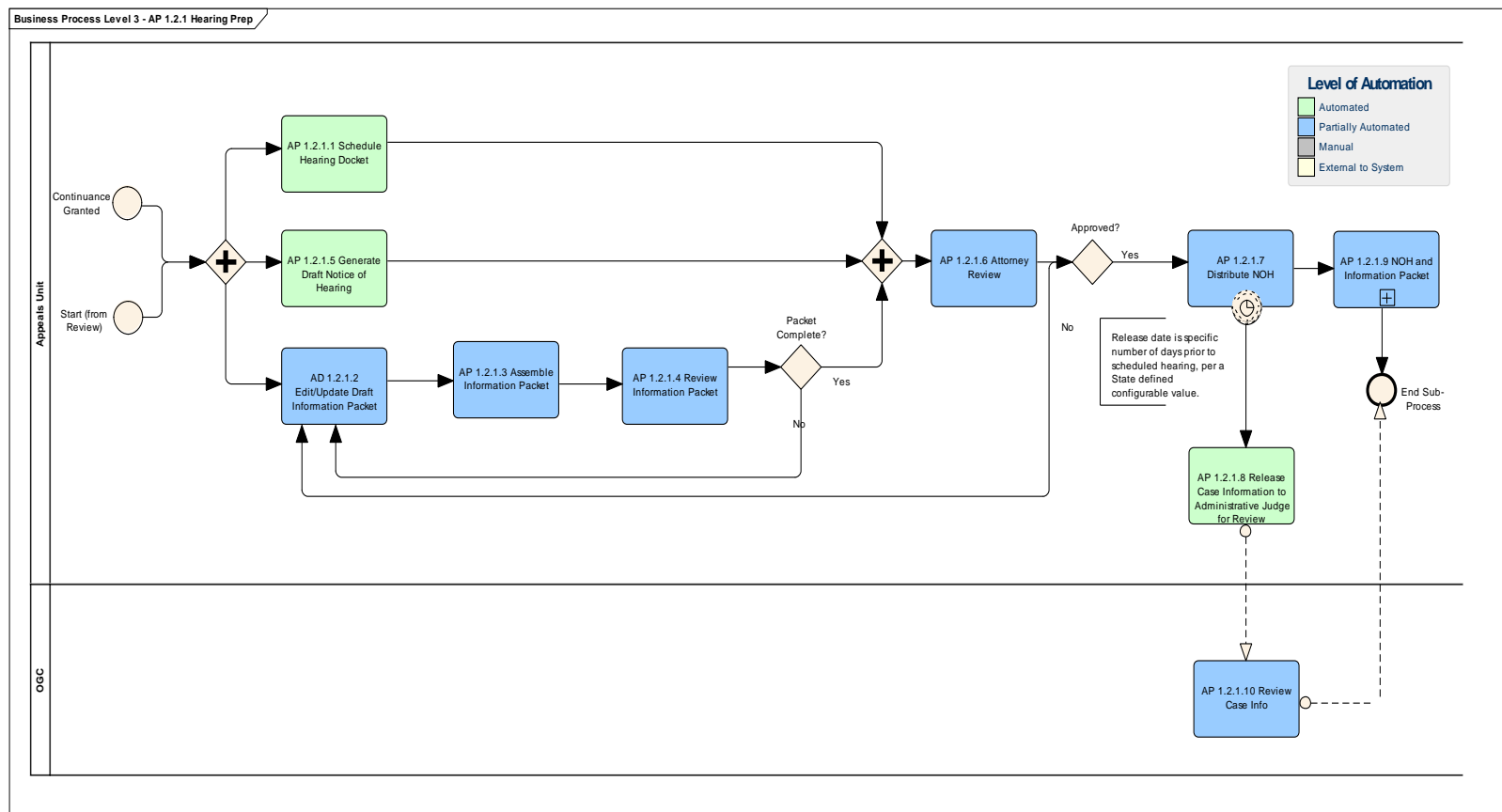
Figure 13-31 Hearing Process (Level 2)



13.6.3.1 Hearing Prep (Level 3)

Before notifying the appellant of a hearing, an extensive review process is conducted to investigate the circumstances, information, and calculations used to determine an applicant's eligibility, and the latest information available regarding the appellant's application information. In parallel, the TEDS system uses a fully automatic process to schedule/maintain the hearing docket and to generate the draft NOH. Following attorney review and approval, the case information is released for administrative judge review and distribution of formal appellant notice of NOH.

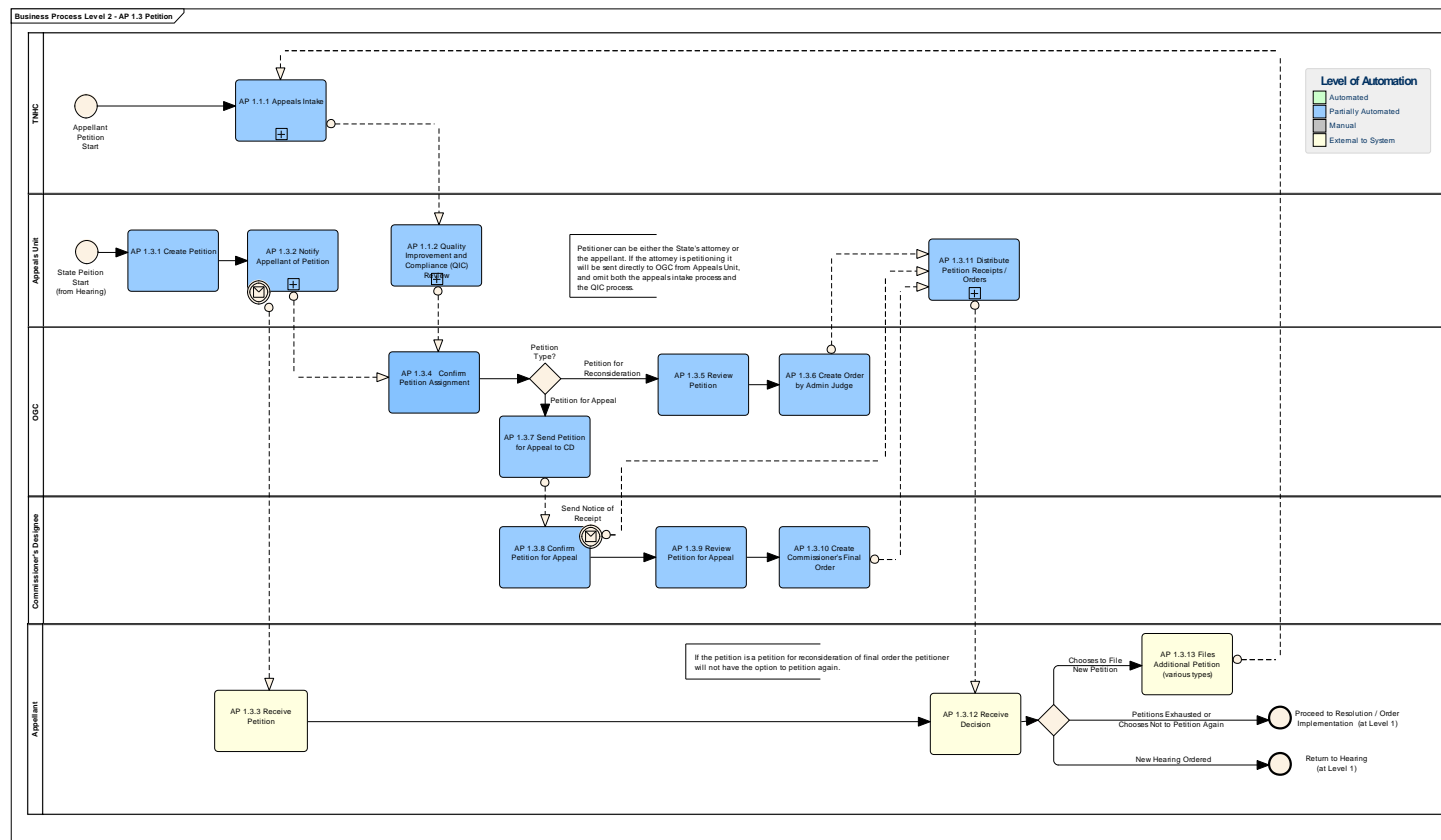
Figure 13-32 Hearing Preparation Process (Level 3)



13.6.4 Petition (Level 2)

Either the appellant or State may file a petition. If the State initiates the process, then notice of the petition is sent to the appellant. If the appellant initiates the process, then the petition goes through the Appeals Intake (13.6.2.1) and QIC review (13.6.2.2) processes. The petition is routed to the administrative judge for the appeals case. The judge confirms the petition type, routing the petition in the system-supported workflow for either judicial review or commissioner's review. Petition orders may result in a return to the hearing process, may overturn prior orders, or may uphold prior orders. Petitioner may accept the petition results or repeat the petition process until escalations have been exhausted.

Figure 13-33 Petition Process (Level 2)

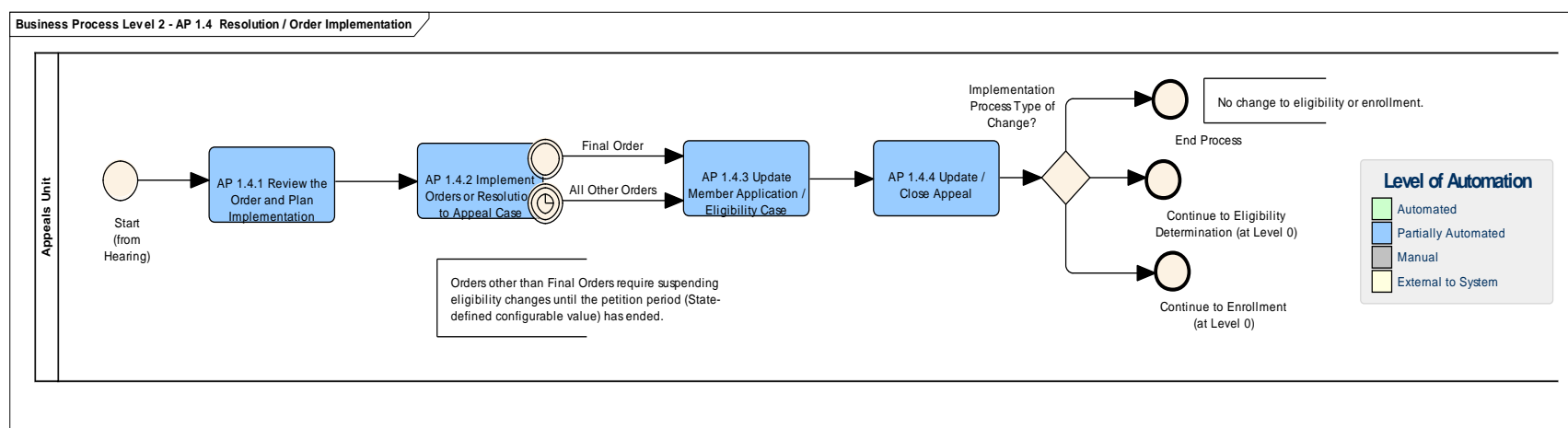


13.6.5 Resolution/Order Implementation (Level 2)

The orders from either a hearing or a petition review undergo a system-supported workflow to plan the implementation, conduct the implementation, update case and application data, and update the appeals case, closing out the process.

- If there is no change to the appellant's eligibility record, then the process ends.
- If the eligibility needs to be redetermined with revised application information, then the process continues to the Eligibility Determination process ([13.3](#)).
- If the change ordered affects only enrollment, such as a change of start date or category of aid, then the process continues to the Enrollment process ([13.4](#)).

Figure 13-34 Process for Implementing Order/Resolution Outcome (Level 2)

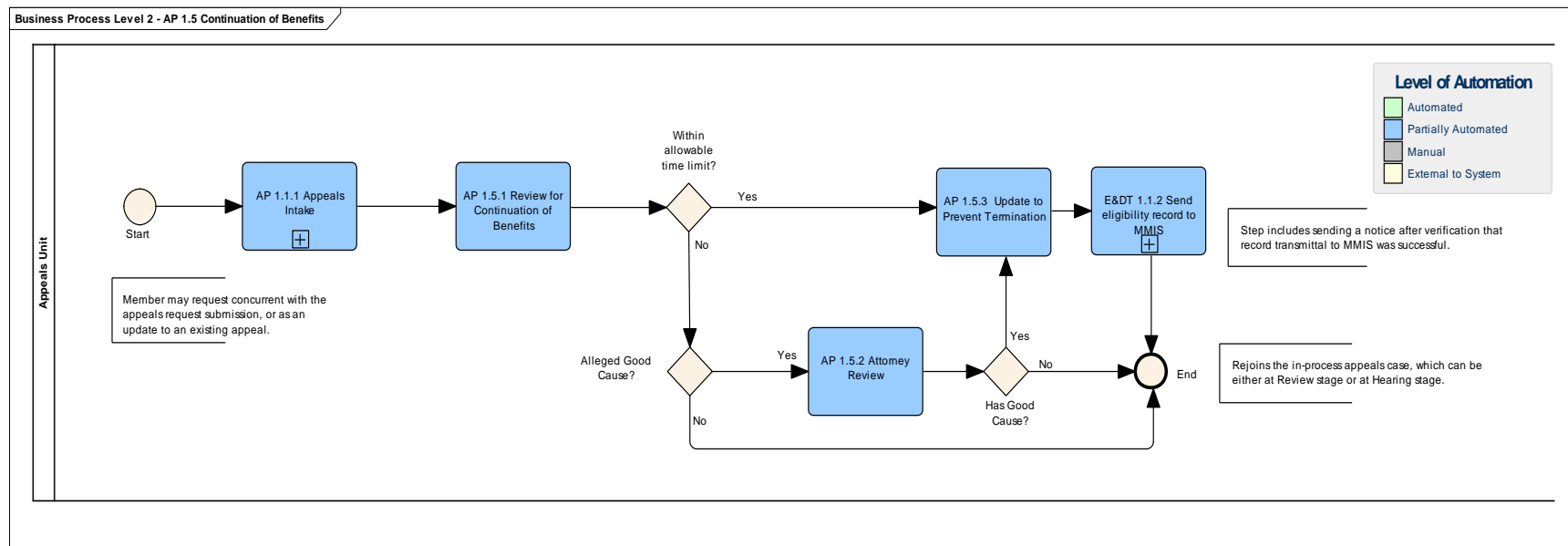


13.6.6 Continuation of Benefits (Level 2)

Concurrent with the intake of an appeals request, or via separate communication, an appellant may request that benefits be continued through the appeals process. The request to continue benefits may be done before or after benefits have been terminated, but before the appeal has been closed out. The request is routed through the common Appeals Intake process ([13.6.2.1](#)).

- If the request is submitted within allowable time limits, subsequent processing is done to update the enrollment information to prevent the scheduled termination or reinstate benefits continuity. Transactions to MMIS enrollment use the common transmittal process ([13.4.1.2](#)), which sends a notice regarding the continuation of benefits to the appellant.
- If the request is not within allowable time limits, then requests are forwarded for attorney review if they include an allegation that the appellant had reasonable good cause for being unable to timely submit the request. The attorney updates the appeals case workflow with the decision regarding the attorney's assessment of good cause.
- The workflow process updates appeals case notes, rejoining the open appeals (in Review or Hearing) stage.

Figure 13-35 Processing Request for Continuation of Benefits (Level 2)



14 FUTURE STATE SOLUTION REQUIREMENTS OVERVIEW

HCFA faces significant challenges in replacing the patchwork of aging and hard-to-maintain mainframe system that is band-aided with numerous workaround one-off solutions. HCFA's technical capability goal is to implement modern technology, improved functional capability, and built-in flexibility for long-term adaptation, while being cost effective and predictable to maintain. The future state will be a reliable platform that can be scaled and expanded to accommodate a growing state population, support of new health care eligibility programs, and support of long-term enhancement and potential integration of other social welfare programs.

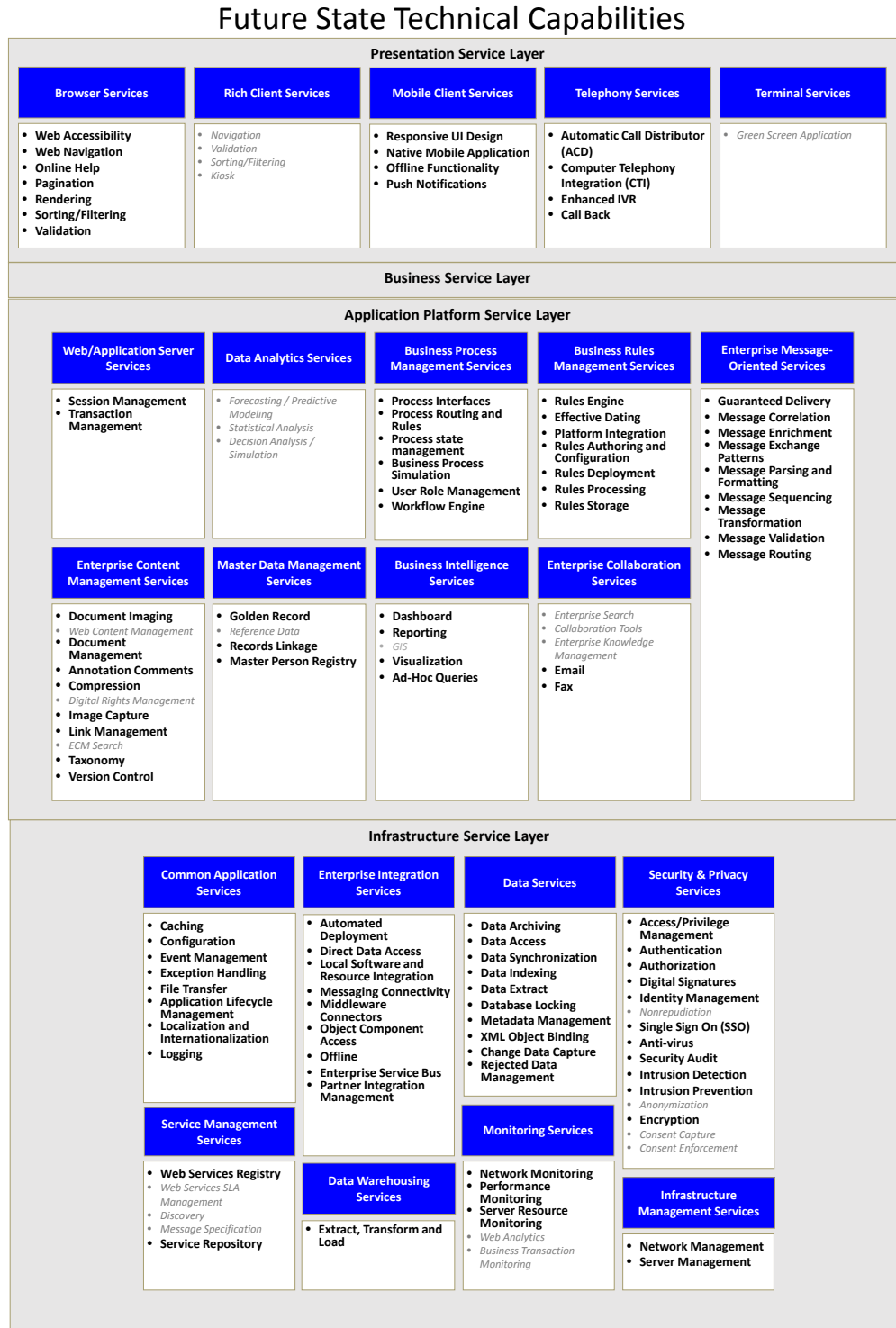
To meet HCFA's requirements, the future state is a modular, SOA-based concept for TEDS. The initial version of the Conceptual Architecture is based on the TAS consultants' industry knowledge, HCFA's needs, and the gap assessment from HCFA's current IT environment. The components of the architecture will be basis of the eligibility solution major features and functions included in the robust Request for Proposal (RFP) used to solicit proposals from qualified system integrators. The proposed Conceptual Architecture builds the foundation for a large enterprise eligibility system, using COTS products from major enterprise software vendors, as well as transferring solutions implemented at other States. It supports the functional and technical requirements for a modern eligibility system and has the flexibility to support HCFA's long-term goals. The core architecture is designed with a modular approach, such that components can be changed, added, or removed, to meet HCFA's future requirements.

The technical capabilities identified for the future state are indicated by the larger **bold** font text within [Figure 14-1](#). Other enterprise-level technical capabilities are shown in smaller, *italicized* font. The technical capabilities model leverages the KERA framework, identifying typical technical capabilities for an enterprise-level systems integration.

In addition to alignment with Member Service's business guiding principles, the Future State Conceptual Architecture incorporates the following IT principles, which are also aligned to HCFA's IT strategy. The Conceptual Architecture:

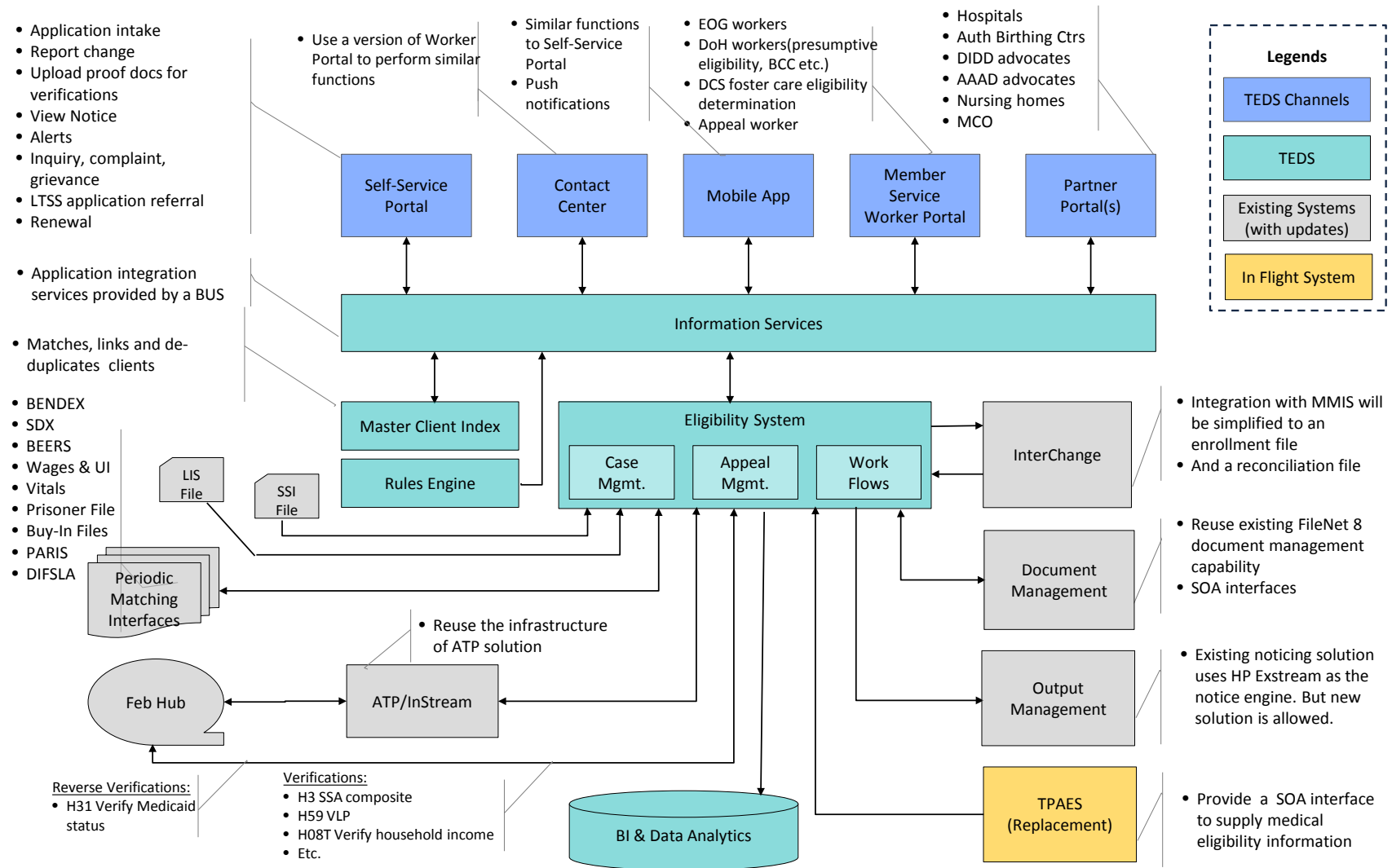
- Is aligned with MITA and fulfills and fully complies with the CMS seven conditions and standards for enhanced MMP funding.
- Employs a layered and modularized approach to implementing system architecture. This approach cleanly separates the system's presentation layer, shared services layer and the underlying COTS products. This allows HCFA to maximize interoperability with other State systems and reduces the eligibility system infrastructure maintenance costs.
- Is deliberately technology agnostic, to allow SIs to propose mature solutions without constraints that would increase development costs.
- Leverages EA methodology to avoid developing new systems in silos. For example, a business capability that is sharable with other programs/agencies is member matching, via an MPI or equivalent capabilities. Other examples include an ESB, ECM, and IdAM.

Figure 14-1 Model of Future State Technical Capabilities



The Conceptual Architecture for the new TEDS solution is depicted in [Figure 14-2](#).

Figure 14-2 Conceptual Architecture of HCFA New Eligibility System



The Future State Conceptual Architecture follows the widely accepted industry structure for maintainability by separating every function into implementation layers:

- Presentation layer – a user interface view (no storage of data)
- Services layer – where calculations are performed
- Data storage layer – where data is stored

Each major system is depicted as a “box.” The data flows between systems are identified, as well as the batch files used to exchange data in a recognized, standard format with SSA, FFM, and other external stakeholders.

The overall architecture, as shown in [Figure 14-2](#), is composed of these major features, which are further detailed in this section:

1. UIs/Points of Access:
 - a. Worker Portal
 - b. Self-Service Portal
 - c. Mobile Application
 - d. Partner Portal
 - e. Contact Center
2. Platform:
 - a. Security
 - b. Automated Business Rules Engine
 - c. Information Services
 - d. Member Matching (via an MPI or equivalent capability)
3. Eligibility System major feature groups:
 - a. Case Management
 - b. Appeal Management
 - c. Workflow Management
 - d. Document Management

- e. Noticing Engine
- 4. Data Exchange with External Stakeholders:
 - a. Periodic matching service
 - b. Account Transfer Process
 - c. Information Verifications
 - d. Interfaces with MMIS – Enrollment
 - e. Interface with TMEDS
- 5. Reporting and Analysis Tools
 - a. BI and Analytics

These major features are shown in [Figure 14-2](#).

14.1 USER INTERFACES/POINTS OF ACCESS

14.1.1 Worker Portal

The worker portal provides HCFA caseworkers with an integrated view of information about a member/applicant and includes a complete historical view of the member's applications and benefits. Eligibility specialist workers will always be required to authenticate their logon identity, providing information access, viewing, editing, and reporting capability based upon on their security profile and business role. This authentication process will be facilitated by “reduced” or “single sign-on” capabilities to minimize the active logon credentials required for each worker to fulfill routine tasks.

As an internal portal, the worker portal uses richer applications and formats, along with Hyper Text Markup Language (HTML), to provide additional content to HCFA workers. In addition, it could also provide appropriate access to collaboration tools (such as a SharePoint) for enhanced staff communication and effective collaboration. The worker portal will also include workflow management for task tracking, alerts, and notifications. This will enable intake and eligibility specialist workers from different program areas to work together as a cohesive team to provide member-oriented outcome value services for applicants.

14.1.2 Consumer Self-Service Portal

An online consumer self-service portal promotes self-sufficiency, enhances outreach, and provides a new channel for applicant/member interaction. It will allow Tennessee residents to apply for services, submit verification documents, view personalized communication, and change/update their application information using any computer (or potentially mobile devices) with Internet access.

The self-service portal provides Web-based access to information related to TennCare and CoverKids services and benefits. Users can freely access general public content. They can also establish an account to personalize their portal view and have access to confidential data regarding their interactions with TennCare and CoverKids programs, including features such as a personalized calendar of events, alerts, and the ability to submit, track, and manage online applications.

The portal, accessed via the Internet, should provide its content in a simple, easy to use format, accessible to a wide audience, including users with disabilities. The portal must support users whose computing resources and capabilities are not within the State's control. It should support multilingual content that can be accessed readily on multiple devices including internet-enabled portable devices such as PDAs and mobile phones. It should be compatible with multiple browser applications and versions.

The portal will enable the provision of standardized, up-to-date and reliable information on services as well as 24/7 access to personal account information. The user's experience of applying for government health care financial assistance will be greatly streamlined and improved to meet the expectations of a consumer population accustomed to the convenience of Amazon.com, FedEx and other such customer-oriented services. This should result in a reduction in worker application data entry time and hold time on contact center phone lines for applicant customer service, with significant impact to day-to-day business operations. Streamlined applications, with information collection tailored to an applicant's personal circumstances will allow caseworkers to focus on human service case planning and management instead of excessive data maintenance transactions. Users will be able to provide complete information in a shorter overall "apply for health care assistance" time cycle.

The Self-Service portal is the most visible component in the Medicaid Modernization effort.

14.1.3 Mobile Application

Mobile devices have become ubiquitous, especially with the low-income population. With the adoption of a mobile access channel, the State can reach individuals who otherwise may not participate in health care assistance programs. These individuals may have barriers that limit their ability to visit local government offices to apply, recertify, or manage their Medicaid or CHIP application and/or benefits. For example, according to the Pew Research Center's "Digital Differences," groups that have traditionally been on "the other side" of the digital divide (in terms of basic Internet access) are now leveraging wireless connections to use the Internet.

Included in findings from the Pew Research are:

- Among smart phone owners, young adults, minorities, those with no college experience and low-income individuals are more likely to say that their phone is their main source of Internet access.
- Currently, 50 percent of adults with household incomes of less than \$30,000 go online wirelessly, frequently using a cell phone.

- Currently, 40 percent of low-income adults who are smart phone owners access the Internet primarily with their smart phones.
- Most of the consumers who rate their Internet access as “mostly via cellphone” also have a desktop or laptop computer at home. However, an estimated 33% of these adults do not have a traditional high-speed broadband connection at home. For this group, the smart phone is the only way to access online without using a public or shared device.

The Mobile Applications will allow mobile access to eligibility and enrollment functionality and notifications via various tools (smart phone, tablet, etc.).

14.1.4 Partner Portal

The partner portal enhances the ability of partners, including authorized State agencies, navigators, health care providers and other organizations, to coordinate with Member Services. It will also provide workers at partner agencies, such as provider organizations, to have access to better consolidated information tailored to their needs and levels of access. This will be a subset of the information available to caseworkers, and will be customized to provider needs. This will streamline the partner’s user experience, while enabling them to provide accurate and timely assistance to consumers. Like the self-service member portal, the partner portal is also accessed via the Internet and provides content in a simple and easy-to-use format that supports a wide range of computing device resources that are not under the HCFA’s control.

[Table 14-1](#) is the list of external stakeholders (including service delivery partners) and their interactions that will be supported by the Partner Portal, as identified by participants at the HCFA Member Services workshops. As described in [Section 10.4.3](#), the various external stakeholders were assessed to determine “Must Have,” “Should Have,” and “Could Have.”

Table 14-1 MoSCoW Analysis of Partner Portal

EXTERNAL PARTNER	INTERACTION TASK DETAILS	PARTNER PORTAL ACCESS
Nursing Facilities	<ul style="list-style-type: none"> • LTSS application referral • Change of circumstance 	Could have
Hospitals	<ul style="list-style-type: none"> • Presumptive eligibility application • Emergency medical assistance application 	Must have
DIDD	<ul style="list-style-type: none"> • LTSS application referral 	Could have
Department of Health	<ul style="list-style-type: none"> • Presumptive eligibility for pregnant women • Presumptive eligibility BCC patients 	Must have

EXTERNAL PARTNER	INTERACTION TASK DETAILS	PARTNER PORTAL ACCESS
DCS	<ul style="list-style-type: none"> Eligibility determination for current foster care beneficiaries 	Must have
AAAD	<ul style="list-style-type: none"> LTSS application and verification facilitation 	Could have
MCOs	<ul style="list-style-type: none"> Facilitation of enrollment verification 	Could have
Revenue Cycle Manager	<ul style="list-style-type: none"> Application assistance and program navigation 	Could have

14.1.5 Centralized Contact Center

The State operates an outsourced consumer contact center—TNHC. This allows for applicants, members, providers, and assistors to contact one central location via phone, fax, or mail. This also is the main entry point for application intake in the absence of a self-service portal. As shown in [Figure 14-3](#), the Future State roadmap considers the impact of TEDS implementation in creating a fully integrated process/consumer information sharing with TNHC operations.

In the future state, TNHC will continue to support application intake through phone, fax, and mail channels—but at a lower volume, as most of the application intake transactions will shift to the Self-Service Portal. TNHC workers will have access to the Worker Portal to directly keyboard enter application data on behalf of a consumer. When performing customer relationship management function, TNHC workers will have relevant applicant information and status readily available with aids for controlled/scripted prompts for streamlined resolution of typical customer service inquiries.

Appeal intake will continue to be handled by TNHC over the phone, as this is the only channel selected by Member Services. However, TNHC workers will now have an integrated information resource that provides not only appeals history, but also associates appeals to determinations and applications.

The contact center should provide IVR capabilities to reduce the need to speak to a person, minimizing call wait times and phone staff workload, and implementing call-back capability for reduced consumer phone hold times.

The current TNHC document management workflow capabilities, which provide document imaging capture service of paper application as well as applicant-submitted verification documents, will be re-engineered to fully integrate with TEDS.

14.2 PLATFORM

14.2.1 Security

HCFA has undertaken a multiyear “Security Transformation” project, which is in-progress. The goal of the organization transformation project is to build security into the process for any IT initiative, ensuring that major projects and HCFA are not put at risk due to security issues. Ultimately, the entire HCFA / Medicaid enterprise will be compliant to the federal security and privacy standards MARS-E.

Included within the project scope, HCFA will conduct a risk assessment of its Information Systems and Data Security. The completed risk assessment will inform HCFA IT of the security priorities in a 3- to 5-year Information Security Roadmap. These transformation priorities will lead to the identification of additional development implementation projects.

The security transformation assessment also seeks to establish a governance framework in the development of the HCFA Information Security Program, as well as information security and data protection initiatives, implementation projects, and security/risk prevention policies. All Medicaid Modernization Projects will need to build security into the systems development process from procurement through testing and into the production operations and maintenance project phases.

[Figure 14-3](#) shows the quarterly roadmap of IdAM projects, with TEDS as the highest priority. HCFA’s project charter includes two phases for implementing and integrating an Access Management program. Phase 1 is estimated to take approximately one (1) year and consists of base hardware/software implementation, Web-based access request forms, and Web-based password resets, and includes the possibility of integration with Active Directory functionality for one other initial system, as well as access recertification checks.

Figure 14-3 TEDS and IdAM Project Timeline Alignment

Preliminary Program Timeline														
	2015				2016				2017				2018	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Eligibility Modernization														
TEDS (Highest Priority)				Initiat. / Proc.					DDI - 18 Mos,	or				24 Mos
Instream														
Account Transfer Process (ATP) Enhancements														
Medicaid Modernization														
MMIS Modernization Enhancements														
MMIS Procurement for takeover														
MMIS Takeover														
TPAES Replacement														
Appeals Systems (TEAMS, KePro) Modernization														TBD
Health Information Exchange														
Modify existing connections with hospitals to include ADT data														
Build new connections with hospitals to receive ADT data														
Integrate ADT data with Care Coordination Tool (CCT)														
Build Master Patient Index to support CCT														
Build Master Provider Directory to support CCT														
Implement CCT and Medicaid Provider Portal														
Analytics Enhancements														
Procurement														
Implementation														
Security Enhancements														
Risk Assessment														
Roadmap Projects														
Identity and Access Management (IAM)	Phase 1				Phase 2 +									

TEDS is expected to comply with HCFA's overall vision, governance framework, and will leverage security services provided by the Security Transformation project. Therefore, the timely rollout of the Oracle-based IdAM services is critical to the TEDS timeline. As currently planned, the phase 1 of IdAM implementation will be completed by the end of 2015. Close monitoring of the progress in the Security Transformation project is needed to ensure the timelines of the two projects are in alignment.

14.2.2 Automated Business Rules Engine

At the core of any modern eligibility system is a flexible rules engine that allows policy makers to quickly move new policies into production with minimal programming resources. The rules engine allows for flexible configurations and easy annual maintenance of values, such as "poverty level." The rules engine also will allow each social welfare program—Medicaid, CHIP and potentially other HHS programs (such as SNAP, TANF and others)—to determine eligibility by their own distinct policies but to share data, minimizing time and effort for both members and case workers.

The use of a rules engine increases determination accuracy and provides validation that appropriate services are authorized. Eliminating incorrect or improper eligibility determinations reduces the potential for Federal penalties and increases the opportunities for enhanced funding.

The future state architecture envisions data intake through multiple member interaction channels (Web, mobile application, mail, fax, kiosk, telephony, and FFM) in a true "No Wrong Door" fashion. Once data collection is completed, the Eligibility Determination and Benefit Calculation (EDBC) process can be initiated automatically. The EDBC process compares application data with the policy rules hosted in the centralized rules engine to determine household/individual eligibility.

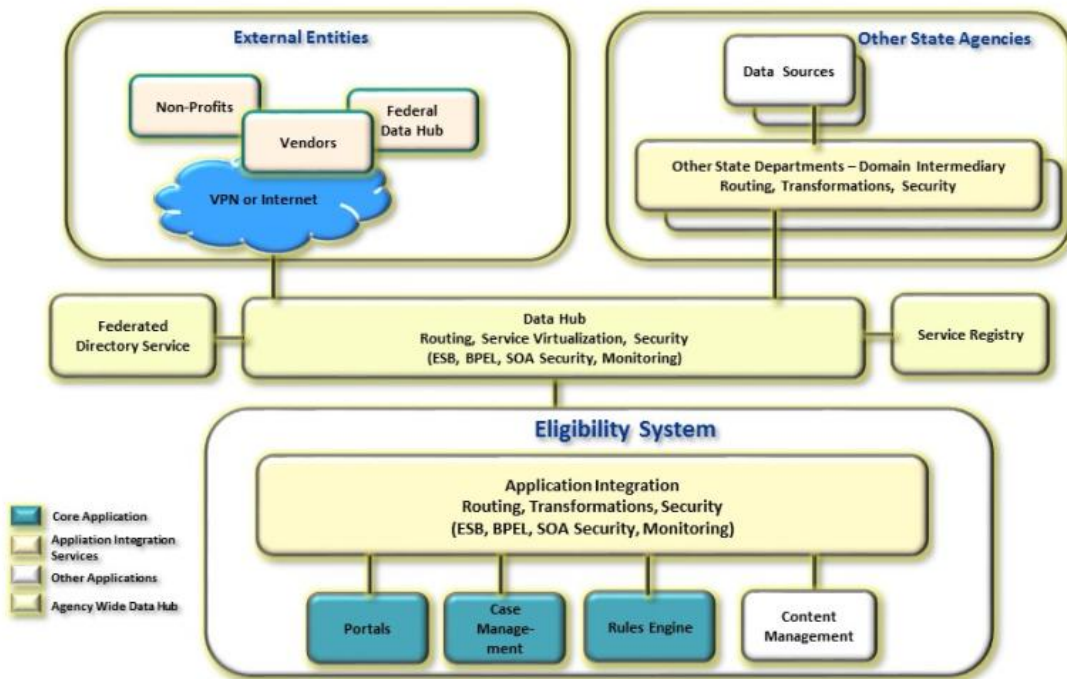
In addition, the TEDS system should be able to be configured to automatically determine eligibility, based upon predefined triggering events such as changes in income and household composition, time lapse since last determination, etc. The integration of preconfigured business and technical services with the appropriate business rules can improve efficiency and reduce the workload on eligibility specialist workers. Using routine prompts and guided workflows enables efficient application processing, so that highly specialized unit caseworkers can review the nonroutine and exceptional cases. Automated workflows also enable more dynamic management of task assignments within units. The cycle time for processing applications is significantly reduced.

14.2.3 Information Services

The future state integration architecture will use SOA standards and principles. As shown in [Figure 14-4](#), the new Eligibility System consists of a set of modules that can be developed with heterogeneous technologies or COTS products, and deployed independently. The distributed system can be built incrementally. Applications within the tiered distributed system will be available as services to other participating agencies as they are built and deployed, in a systematic transformation to a fully integrated infrastructure. Additionally, systems will be loosely coupled with each other, so that newly developed applications will not have a major impact on existing applications.

Also, as detailed in [Figure 14-4](#), HCFA will establish a tiered structure when designing an overarching integration architecture. The integration architecture can be separated at application integration, inter-agency, and intra-agency levels.

Figure 14-4 Tiered Integration Architecture



The application integration tier integrates various components that constitute the TEDS solution using a common bus. This process management infrastructure enables broad participation from multiple system integrators.

HCFA has established an IBM Integration Bus based interoperability platform and an SOA center of excellence. The ESB should apply common messaging and interoperability standards across all business services and provide a consistent framework for applying crosscutting functionality for security, monitoring, and guaranteed delivery. Well-defined XML-based models provide the consistent information model and taxonomy that are compatible with industry-standard enterprise services. Rich metadata for all services is available within the metadata catalog for design time and within service registry and repository for run-time discovery. This promotes maximum reuse and modularity within the solution.

The ESB should support common messaging patterns, such as:

- **Store and forward:** Ability to persist a message and then send it to destinations.
- **Publish/subscribe:** Ability to distribute a message to multiple destinations based on a message attribute usually described as the subject area of the message.

- **Request/reply:** Ability to correlate asynchronous messages so that the target's response is associated with the appropriate request made by the source.
- **Guaranteed delivery:** Ability to use a built-in data store (local storage disk space in a participant computer) to persist messages in each participant computer on which the messaging system is installed. The message is safely stored until it is successfully delivered. In this way, it ensures guaranteed delivery.
- **Content-based:** The ability to route a message based on an outcome value or values within the message.

All services that interface with systems outside TEDS (such as the Federal Services Data Hub, and various State systems) will be managed, creating a gateway. The hub gateway isolates TEDS from having a point-to-point interface with each external system. Due to the gateway interface, when external systems change, impact to TEDS will be minimal. This method creates one single consistent interface for TEDS to initiate interaction with a specific entity without any knowledge of the specific system's inner workings. This benefits HCFA by reducing solution complexity and enhances solution performance, maintainability, and scalability

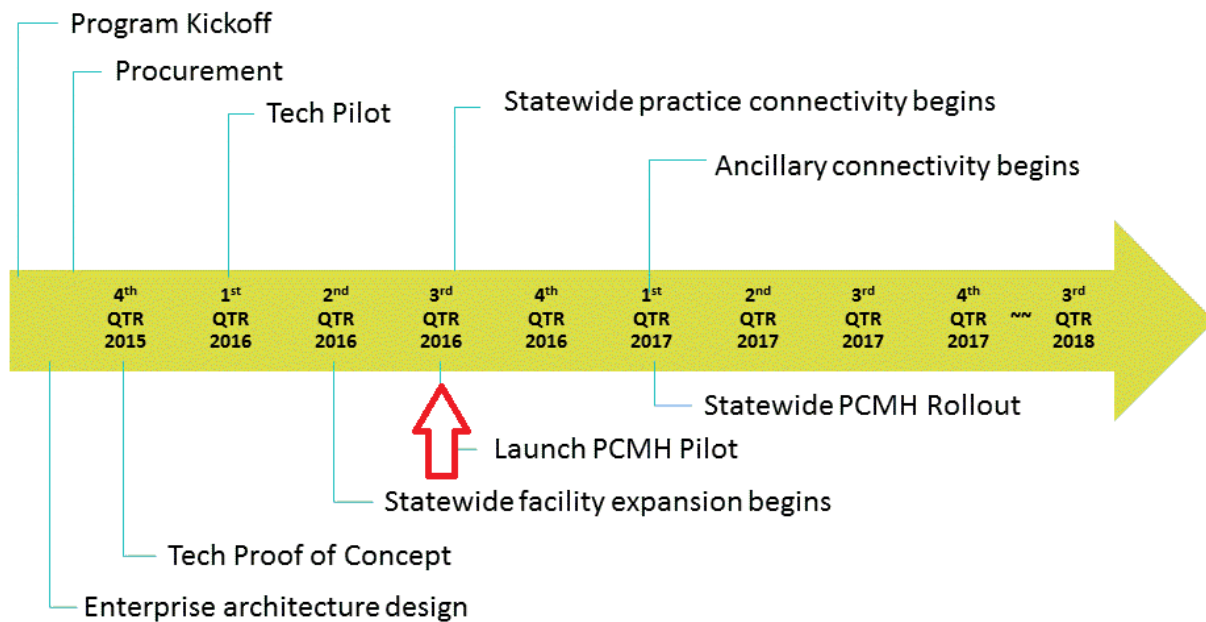
14.2.4 Master Patient Index (MPI)

Member matching via an MPI (or similar capability) will allow the unique identification of applicants and members across different IT systems (both within an agency and across agencies). This will facilitate the provision of a holistic view of a member/applicant that includes information stored across multiple systems. The MPI should be implemented as a single repository across HCFA programs. It will store common member identifying information. This central repository will facilitate the unique identity of members/applicants and prevent duplication.

HCFA's HIE project has also identified MPI as a critical need. TEDS plans to leverage this implementation for the member matching capability. This is especially true considering the initial data source planned for HIE's MPI is MMIS.

Close monitoring of the progress in the HIE project is needed to ensure the timeline of the two projects are in alignment for the member matching rollout date. In the long term, the member matching capability should include data sources from all HHS programs.

Figure 14-5 HIE Project Timeline and MPI Rollout Date



14.3 ELIGIBILITY SYSTEM MAJOR FEATURE GROUPS

14.3.1 Case Management

An online case management system allows caseworkers to more efficiently manage their work, including intake and case creation, data collection, automated case notes, and rules-based eligibility determination and benefits calculation. Task accuracy is enhanced via workflow prompts and scripts for correspondence, reporting, and system administration, including worker assignment and security. It provides a comprehensive solution for caseworkers to retrieve and view relevant information and perform all their tasks without having to manually lookup information from other systems. The case management system can maintain a history of all benefits and eligibility determination outcomes for each applicant, as well as the applicant's current and historical household information. When eligibility determinations are made, they will be sent to the enrollment system for processing.

The case management system eliminates the current process of caseworkers reviewing paper applications.

Supervisors can timely monitor and review cases and workflows. Caseload levels and decision time limits can be used as triggers to alert management to potential backlogs. Performance metrics can be defined and captured at the individual, group, office, or district level. Based on the mutually agreed upon approach, these metrics can be available in hard-copy reports, real-time queries or management dashboards.

14.3.2 Appeals Management

The Appeals Management processes implement the functionality to receive, track, and respond to appeal requests, schedule hearings, and track appeals outcomes. The Eligibility System will provide Member Services with integrated appeals process capability.

Applicants will have the ability to request an appeal through TNHC by phone, mail, or fax. TNHC will then submit the appeal electronically; which generates an appeals case and triggers the appeals workflow. Once submitted, system workflows within TEDS will route the appeals requests and trigger a series of actions, including tracking the status of the appeal, assigning the appeal, and recording results and uploading documentation to support appeals decisions. The notifications component of TEDS will improve customer service, allowing a caseworker to notify the appellant of the status of the appeal and/or a change in eligibility determination based on the appeal decision. Appeals unit workers will have the ability to view the appeal status, the hearing date/time, and have the ability to intake new information from the appellant and share that information with other workers in the Appeals Unit.

The current HCFA appeals system, TEAMS, is slated for replacement. However, because the administration of eligibility appeals should be an integral part of eligibility systems, and is one of the core processes in MITA, the new TEDS will include fully integrated appeals system functionality. There is no compelling reason to replace one stand-alone system with another separate silo system, which would perpetuate the current disjointed process. Integration avoids the cost of running two systems that depend on the same data and avoids the complexity and delays associated with supporting interfaces between two separate systems.

14.3.3 Workflow Management

TEDS will include a workflow engine that provides flexibility in managing and tracking application and case workflow. The workflows include flows associated with application for all health care financial programs, the ability to escalate tasks/cases to a supervisor, and the ability to support validation of multiple collaborative case reviews. Workflow management identifies bottlenecks and includes automated workflows for intake, eligibility verification, and eligibility determination. It can be configured to automatically perform business functions without caseworker intervention.

14.3.4 Document Management

The Document Management capability will provide a central store of digitized eligibility and applicant / member verification documents. The documents submitted by applicants and members will be uploaded, scanned, imaged, tagged, indexed, and stored in a central repository. Agencies and programs will have access to these documents, as needed in an appropriate roles-based control.

The ability to collect and share document images among agencies and programs will reduce the amount of times applicants and members need to provide documentation when applying for multiple program services. Enabling document image management throughout HCFA will help the State realize the following benefits:

- Reduce caseworker workload by allowing applicants and members to upload verification documents through self-service channels (online and mobile).
- Improve member services by allowing workers near real-time access to verification documentation, thus improving responsiveness to applicant/member requests.
- Reduce administrative burdens on members and workers, as verification documentation should only need to be provided once.
- Provide timely information about the applicant/member's history to relevant stakeholders (agencies/ programs), thereby reducing the response time and tailoring services to the specific member's needs.

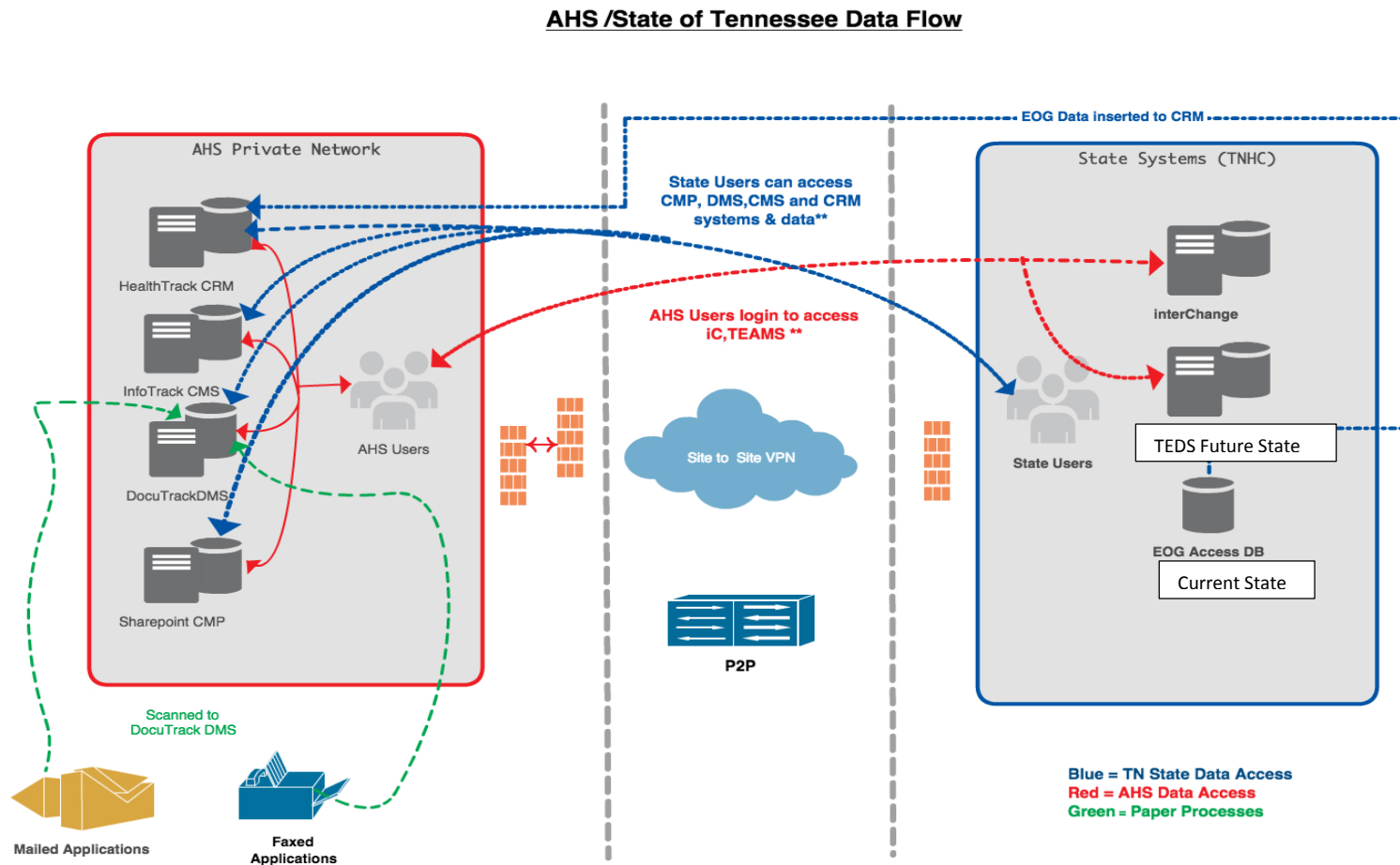
HCFA currently has imaging capabilities through TNHC, with an existing FileNet infrastructure that can be leveraged to develop a future state technology implementation solution that provides broader document imaging management capabilities. TEDS requires capability to upload documents through the online portal and mobile devices as well as allowing a worker portal to access documents stored on the FileNet infrastructure.

The Medicaid Modernization project will assess the current tools used to scan and store documents as well as how documents are indexed and linked to cases and members.

[Figure 14-6](#) shows the future state plan that enables information sharing between TNHC and HCFA caseworkers.

Figure 14-6 TNHC Information Sharing of Applicant/Member Documents

Diagram Source: AHS Contract for TNHC Services



14.3.5 Noticing Engine

Currently, eligibility notice generation is handled by MMIS. HP has utilized HP Exstream for notice generation for both eligibility-related notices and enrollment correspondence. Several technical operations-related problems were reported by stakeholders with regard to the current HP Exstream implementation, which will be resolved in the future state by revising operations:

- Bulk printing issue (>5000 letters) – Investigation determined that Exstream is not the cause of bulk printing delays, but is caused by the contractor operation at HCFA’s Print Center. The HP-controlled mail vendor does not demonstrate the same problem when using Exstream. Therefore, in the future state, the issue will be resolved by operations management transferring high volume outreach to HP-controlled mail vendor operations.
- Use of HP Exstream, requires strict notice content adherence to design rules for paragraph formatting (commonality language). HP Exstream does not support splitting content automatically across pages.
- HP Exstream can only populate in a pdf format. When converting from pdf to Word for re-editing and maintenance of content, a lot of formatting is lost (“almost easier to start over”).
- Bolding Issues – which affects spacing with the dynamic text (either removes or adds spaces).
- Inter-dependency on common objects – Editing to improve the layout of a single notice affects other templates that utilize the same object, which interferes and diminishes the quality of the other template’s layout presentation. Minor changes to one template domino into significant task time to resolve all impacted templates.

In the future state, HCFA should encourage the SI to leverage existing Exstream licenses, which will reduce initial cost, but structure the RFP so that the SI can propose both new technology and different operations/mailing vendor.

14.4 DATA EXCHANGE WITH EXTERNAL STAKEHOLDERS

The new TEDS system will need to integrate with eligibility-related information exchanges for external stakeholders, initially including:

- Account Transfer Process – will become both in-bound and out-bound with FFM
- Information Verifications – real-time electronic verifications of applicant information
- MMIS – will become both Medicaid & CHIP enrollment store for eligible applicants
- TMEDS – medical need assessments for long-term care applicants, replacing the TPAES
- Periodic Matching Service – for posteligibility monitoring of members

14.4.1 Account Transfer Process and other FFM Information Exchanges

The Eligibility System will need to communicate with the FFM. Applicants who apply through the State, and are determined as “not eligible for Medicaid” must have their application transferred to the FFM, as an outbound account transfer from the State. Similarly, Tennesseans who apply for health care through the FFM (www.HealthCare.gov) but are potentially eligible for Medicaid or CHIP will have their application transferred from the FFM to TEDS as a “referral” of the individual applicant via an inbound account transfer to the State. The account transfer process assures “no wrong door,” so that the individual applicant is assured of evaluation for all health care financial assistance programs via a single, streamlined application submitted through any intake channel.

The State has implemented a temporary ATP for processing in-bound account transfers from the FFM. The current process requires extraction and parsing of FFM in-bound data into separate load files for processing:

- Medicaid FFM determinations for Tennessee processing as enrollments – which in the future state will become referrals for HCFA to process eligibility
- CHIP FFM determinations for Tennessee processing as enrollment in separate CHIP data store – which in the future state will become referrals for HCFA to process eligibility
- Referrals from FFM of applicants for eligibility determinations on basis other than MAGI – currently requiring significant manual processing

TEDS will replace the manual processing with an automated Web services-based solution. Initially the interface from FFM will be a batch process, whereby TEDS receives the file of referrals—opening a case for each applicant and performing the eligibility determination. As the FFM processes evolve into real-time account transfer, then TEDS will receive real-time individual referrals.

The D1H31 project is currently in the testing phase. This project provides a D1H31 formatted real-time information exchange, whereby the FFM requests enrollment verification and MMIS responds with Medicaid enrollment verification. When TEDS is implemented, then CHIP eligibility determinations for CHIP enrollments will be routed through MMIS, which will record both Medicaid and CHIP enrollments. The D1H31 interface currently returns an “information not available” code regarding CHIP enrollments. In the future state, the D1H31 interface will be able to verify CHIP enrollment from the MMIS enrollment data store.

14.4.2 Information Verifications

To ensure both the timeliness and accuracy of determinations, automated verification of applicant information is essential. TEDS will interface with the FDSH to leverage near real-time verification services for identity, citizenship/immigration lawful presence, annual income, and current income information.

The TEDS rules-based system will evaluate whether or not an applicant’s information is reasonably compatible with electronic sources. If the information is inconsistent (or unable to be verified because no data was found for the applicant), then the TEDS system will notify the

applicant. The applicant's case will be processed through an "inconsistency workflow" which includes contacting the applicant, receiving the applicant's documents, performing eligibility specialist review of proof documents and adjudicating to resolve the inconsistency.

The TEDS system will support information sharing. In this manner, information submitted by the applicant to obtain health care assistance will be available for appeals unit caseworkers. In the long-term future state, the same information may be available for use by other social welfare programs, such as SNAP/TANF.

14.4.3 Interfaces with MMIS iC

In the current state, HP has been supporting eligibility-related processes via the iC MMIS, including processing for:

- Periodic matching files from SSA
- SSI and LIS files from SSA
- Pseudo SSN Termination (reinstated within MMIS)
- Account Transfer from FFM to TN
- Matching FFM inconsistent applicants with SNAP application records
- Presumptive Eligibility for pregnant women
- Newborn Presumptive Eligibility
- 1095B Minimum Essential Coverage (MEC) IRS extract (will verify both Medicaid and CHIP enrollment in future state)
- Generation of Eligibility Notices (out of Exstream)
- Suspension of Inmate Medicaid Eligibility
- Redetermination support

In the current state, some of the input flows into Medicaid enrollment completely bypass the ACCENT case management system. In the future state, all eligibility-related processes will be performed within TEDS. Some of the input interfaces feeding into MMIS will transition to feed into TEDS. All eligibility processing and records will be within TEDS. From TEDS, the eligibility results will flow into MMIS for enrollment data store of both Medicaid and CHIP.

The MMIS interfaces can be simplified into a daily eligibility file sent by the Eligibility System to MMIS to authorize enrollment processing. This meets the requirement that benefits start date will occur on any day of a month (and not only the first of the month, for example). The future state will include a monthly reconciliation process between MMIS and TEDS to ensure data synchronization. The SI vendor for TEDS will be required to comply with the already established standard interface formats in order to minimize the impact on MMIS.

14.4.4 Interface with TMEDS – Medical Need

TMEDS is an in-progress project to replace TPAES. This project modernizes and enhances the State's legacy TPAES solution with a rules-based engine workflow.

Currently, there is no integration between legacy TPAES and the ACCENT system used for case management of long-term services and support applications. Manual processes are used to extract data from TPAES and provide eligibility specialist access via maintenance of stand-alone data stores.

The future state TEDS system will send to TMEDS the request for performing the long-term care preadmission medical evaluation. TEDS will utilize a real-time interface with TMEDS, providing caseworkers a fully automated status of an applicant's medical need determination received from TMEDS.

14.4.5 Periodic Data Matching Service

In addition to FDSH, the State relies on a number of data matching services provided by federal and State agencies to prevent or reduce fraud and abuse in federally assisted benefit programs. These "legacy interfaces" include:

- BENDEX
- SDX
- SVES
- Vital Statistics
- Prisoner File
- Supplementary Medical Insurance (SMI) Buy-In
- BEERS
- PARIS
- DIFSLA

The future state TEDS will phase-in a transition of processing files used for purposes of periodic matching. All eligibility determination information will flow through TEDS. For example, if a match is located in the incarceration file, then the determination to suspend Medicaid benefits will occur in TEDS, and then information will flow from TEDS to MMIS. To the greatest extent possible, the incoming file processing will be replaced from MMIS to TEDS.

14.5 REPORTING AND ANALYSIS TOOLS

This current legacy systems support static reports, which are further limited to only the data stored on the legacy system. TEDS will significantly improve reporting capabilities to include:

- Standard reports
- Dashboard dynamic status reporting of workflows
- Ad hoc query from user-defined parameters for dynamic reporting from a centralized total data store of all eligibility information.

14.5.1 Business Intelligence and Analytics

BI applications and technologies gather, store, analyze, and provide access to data to enable statistical, data-driven business decisions. BI solutions provide the foundation for decision making utilizing aggregate case data. Combined with demographic information (such as the number of prospective members potentially eligible for a new program of service), these tools can accurately forecast service quantities, application volumes and program budgeting.

BI tools facilitate performance-based management of programs where performance and progress are measured against specific objectives and program budgets. It enhances budget forecasting by using statistical methods to correlate specific attributes with cost outcomes. These tools enable “what if” financial modeling, by using a given attribute value as a driver via statistical correlation to accurately predict a financial outcome.

The TEDS RFP will allow for SIs to propose BI capabilities that support flexible statistical analysis and financial modeling. TEDS will provide the ability to conduct analysis on data across all health care financial assistance programs.

14.6 REQUIREMENTS TRACEABILITY MATRIX

The solution functional and nonfunctional requirements are controlled in the separate document, Requirements Traceability Matrix, located within the RFP document package.

APPENDIX A: ACRONYMS USED IN THIS DOCUMENT

Table A-1 Acronyms Defined

ACRONYM	DEFINITION
AAAD	Area Agency on Aging and Disability
ABD	Aged, Blind and Disabled (refers to a group of benefit aid categories)
ACCENT	Automated Client Certification and Eligibility Network for Tennessee
ACF	Administration for Children and Families
AHS	Automated Healthcare Systems
AIR	Appeals Issue Resolution
APDA CIR	Application Processing Delay Appeal and Comprehensive Inventory of Records, referring to system asset APP-012
APTC	Advanced Premium Tax Credits
ART	Appeals Resolution Team
ATP	Account Transfer Process
BCC	Breast or Cervical Cancer, a program category of eligibility
BEERS	Beneficiary Earnings and Exchange Records System ¹¹
BENDEX	SSA Beneficiary Data Exchange System
BI	Business Intelligence
BOM	Business Operating Model
BPM	Business Process Management, system asset APP-013, Appendix H
BVTQ	Business Value Technical Quality
CAC	Certified Application Counselor
CDC	Centers for Disease Control

¹¹ HCFA is no longer processing the BEERS file. It is not currently used to determine eligibility or perform post-eligibility verifications.

ACRONYM	DEFINITION
CFR	Code of Federal Regulations
CHIP	Children’s Health Insurance Program, marketed under the name of CoverKids
CMOD	Content Manager On Demand, system asset APP-024, Appendix H
CMS	Centers for Medicare and Medicaid Services
COTS	Commercially available Off The Shelf product (configurable for customization but not unique or wholly custom built)
CPT	Claim Payment/Advice Transaction
CRM	Customer Relationship Management
DB	Database, referring to system assets listed in Appendix H
DCS	Department of Children’s Services
DHHS	Department of Health and Human Services
DHS	Department of Human Services
DIDD	Department of Intellectual & Developmental Disabilities
DIFSLA	Disclosure of Information to Federal, State, and Local Agencies
DMS	Document Management System
DOE	Department of Education
DOH	Department of Health
DOL	Department of Labor
EA	Enterprise Architecture
ECM	Enterprise content management
EDBC	Eligibility Determination and Benefit Calculation
EJB	Enterprise Java Bean, an attribute of system asset APP-017, Appendix H
EMPI	Enterprise Master Person Index, system asset APP-019, Appendix H
EMS	Emergency Medical Services

ACRONYM	DEFINITION
EOG	Eligibility Operations Group
EPSDT	Early Periodic Screening, Diagnosis, and Treatment
ERA	Enterprise Reference Architecture
ESB	Enterprise Service Bus
ESM	Enterprise System Modernization, potential future system replacement for ACCENT
FDSH	Federal Data Services Hub
FFM	Federally Facilitated Marketplace
FRR	Financially Responsible Relatives
FTI	Federal Tax Information
HCBS	Home and Community-Based Services
HCFA	Division of Health Care Finance and Administration
HCP	Healthcare Claims Processing
HCPCS	Healthcare Common Procedure Coding System, attribute of system asset APP-014, Appendix H
HDI	Healthcare Data Integration, attribute of system asset APP-014, Appendix H
HHS	Health and Human Services
HIE	Health Information Exchange
HIPAA	Health Insurance Portability and Accountability Act
HIT	Health Information Technology
HIX	Health Insurance Exchange
HP	Hewlett-Packard (contractor)
HTML	Hyper Text Markup Language
IBM	International Business Machines, referring to system assets Appendix H
iC	interChange, referring to system asset APP-004, Appendix H

ACRONYM	DEFINITION
IdAM	Identity and Access Management
IIB	IBM Integration Bus, referring to system asset APP-018, Appendix H
IRS	Internal Revenue Service
ISAPI	Internet Server Application Programming Interface, an attribute of system asset APP-030, Appendix H.
IT	Information Technology
IV&V	Independent Verification and Validation
IVR	Interactive Voice Response
J2EE	Java 2 Platform Enterprise Edition, an attribute of system asset APP-030, Appendix H
JDBC	Java Database Connectivity, an attribute of system asset APP-017, Appendix H
KERA	Enterprise Reference Architecture
KPI	Key Performance Indicator
KY	Kentucky
LIS	Low Income Subsidy
LTSS	Long-Term Services and Supports (also known as Institutional Medicaid)
MAGI	Modified Adjusted Gross Income
MARS-E	Minimum Acceptable Risk Standards for Exchanges – CMS’ Exchange Reference Architecture Supplement
MCO	Managed Care Organization
MEC	Minimum Essential Coverage
MITA	CMS Medicaid Information Technology Architecture
MMIS	Medicaid Management Information System
MMP	Medicaid Modernization Program

ACRONYM	DEFINITION
MoSCoW	“Must have,” “Should have,” “Could have,” and “Would like but won't implement”
MPI	Master Person Index (utilized to prevent duplicate applicant/member records). Also – Master Patient Index (in context of health information data)
MS	Microsoft
MSP	Medicare Savings Program
NHSIA	National Human Services Interoperability Architecture
NIST	National Institute of Standards and Technology
NOH	Notice of Hearing
ODBC	Open Database Connectivity, an attribute of system asset APP-017, Appendix H
OeHI	Office of eHealth Initiatives
OIG	Office of Inspector General
OIR	Office of Information Resources
PAE	Pre-Admission Evaluation
PARIS	HHS Public Assistance Reporting Information System (used in posteligibility verifications for monitoring enrollment in other States)
PCG	Public Consulting Group
PPACA	Patient Protection and Affordable Care Act
PTBMIS	Patient Tracking Billing Management Information System
QDWI	Qualified Disabled Working Individuals
QI 1	Qualified Individuals
QIC	Quality Improvement and Compliance Review, a group of activities within the appeals work process
QMB	Qualified Medicare Beneficiary
RFP	Request for Proposal

ACRONYM	DEFINITION
RRI	Recognition Research, Inc.
SAMHSA	Substance Abuse and Mental Health Services Administration
SAS	Statistical Analysis System, referring to system asset APP-015, Appendix H
SAVE	System for Alien Verification of Entitlements
SBM	Serena Business Manager, referring to system asset APP-030, Appendix H
SDLC	System Development Lifecycle
SDX	State Data Exchange, a file originating from the SSA that identifies SSI benefit recipients
SFTP	Secure File Transfer Protocol
SHIP	State Health Insurance Assistance Programs
SI	System Integrator
SLMB	Specified Low Income Medicare Beneficiaries
SMA	State Medicaid Agency
SME	Subject Matter Expert
SMI	Supplemental Medical Insurance
SNAP	Supplemental Nutrition Assistance Program
SOA	Service Oriented Architecture
SOAP	Simple Object Access Protocol, an attribute of system asset APP-017, Appendix H-
SOLQ	State Online Query
SPMO	Strategic Program Management Office
SQL	Server Query Language
SSA	Social Security Administration
SSI	Supplemental Security Income
SSN	Social Security Number

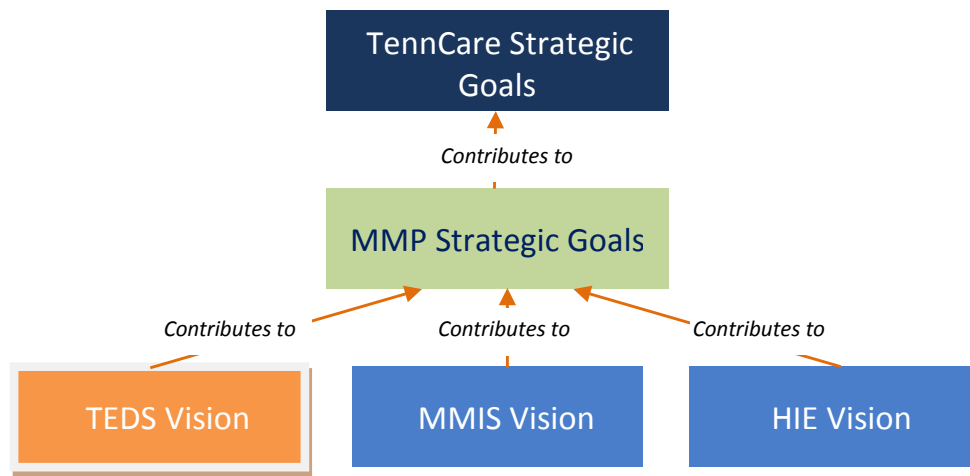
ACRONYM	DEFINITION
STS	Strategic Technology Services
SVES	State Verification and Exchange System
SWICA	State Wage Information Collection Agency
TANF	Temporary Assistance for Needy Families
TAS	Technical Advisory Services
TCIS	TennCare Information Systems
TEAMS	Tennessee Eligibility Appeals Management System
TEDS	Tennessee Eligibility Determination System (former eligibility project name)
TMEDS	Tennessee Medical Eligibility Determination System (project to replace TPAES)
TN	Tennessee
TNHC	Tennessee Health Connect, the public-facing contact center for receiving applications for health care financial assistance
TOGAF	The Open Group Architecture Framework
TPAES	Tennessee Pre-Admission Eligibility System
TPL	Third-party Liability
TSU	TennCare Solutions Unit
UAT	User Acceptance Testing
UI	User Interface
USPS	United States Postal Service
UX	User Experience
VA	(Department of) Veterans Affairs
VOD	Verification of Death
VOS	Virtual One Stop
WIC	Women Infants and Children

ACRONYM	DEFINITION
WOTC	Work Opportunity Tax Credit (in context of system asset APP-005, Appendix H)
WSRR	WebSphere Service Registry and Repository
XML	Extensible Markup Language

APPENDIX B: HCFA EXECUTIVE VISION AND GUIDANCE

The mission, vision, and guiding principles are used to assure alignment of all initiatives. The vision contributes to the MMP, which in turn contributes to TennCare strategic goals. As shown in [Figure B-1](#), the mission for eligibility and enrollment contribute to strategic goals at all levels of the organization.

Figure B-1 Strategic Goals



B.1.1 TennCare Strategic Goals

TennCare’s Demonstration Evaluation Design includes the following strategic goals:

- Use a managed care approach to provide services to Medicaid State plan and demonstration enrollees at a cost that does not exceed what would have been spent in a Medicaid fee-for service program
- Assure appropriate access to care for enrollees
- Provide quality care to enrollees
- Assure enrollees satisfaction with services
- Improve health care for program enrollees
- Assure that participating health plans maintain stability and viability, while meeting all contract and program requirements

(Source: TennCare Demonstration Evaluation Design, draft of 6/29/2015)

B.1.2 Medicaid Modernization Program Strategic Goals

The MMP strategic goals contribute to the TennCare strategic goals.

The MMP strategic goals are:

- Obtain strategic, Business and IT capabilities and capacity to plan, manage, and complete HCFA's strategic, complex, high-risk MMP projects through:
 - TAS
 - Strategic Program Management Office (SPMO) Services
 - Independent Validation & Verification (IV&V) Services
 - Systems Integrators (SI)
- Be flexible to accommodate change (new strategic insight, or regulatory change).
- Align the State and all contractors in their support activities towards achieving program objectives.
- Align contractor payment milestones maximize cooperation towards milestone achievement / deliverables completion.
- Provide effective support for sustained operation and continuous improvement of the HCFA MMP Governance Organization and Business and IT Capabilities.
- Provide for effective planning and execution for transition of new Business and IT Capabilities to the State over the contracts—where economically practical—to progressively lower the cost of program management.

(Source: MMP Overview)

B.1.3 Mission for Tennessee Eligibility Determinations & Enrollment

The mission for the TEDS is to enable a modern eligibility and enrollment organization that provides exemplary services to its Members, based on leading practices.

B.1.4 Mission for TCIS

The mission for TCIS is to provide systems that support and enhance Bureau workflow and processes, while also providing timely access to accurate and meaningful information, enabling informed decisions and better program management.

(Source: HCFA – Bureau of TennCare 2015–2017 Information Systems Plan)

APPENDIX C: KERA CAPABILITIES FRAMEWORK

Section intentionally left blank.

APPENDIX D: KERA CAPABILITIES DEFINED

Section intentionally left blank.

APPENDIX E: EXTERNAL STAKEHOLDER

[Table E-1](#) lists the HCFA external stakeholders alphabetically within the four major groups:

1. Client/Members, including applicants
2. Business Partners
3. Suppliers
4. Governing Organizations

Table E-1 Stakeholder Communication Capabilities¹²

CLIENT/MEMBER STAKEHOLDER GROUP	BUSINESS PARTNERS STAKEHOLDER GROUP- SERVICE DELIVERY	SUPPLIERS STAKEHOLDER GROUP	GOVERNING ORGANIZATION STAKEHOLDER GROUP
Applicant	AAAD	County	Centers for Disease
Authorized	Attorney General	Incarceration	Control (CDC)
Representative	DCS	Information (via	CMS
CAC	Department of	Appriss developed	Comptroller and
Advocates	Health	system)	other outside
Member	DHS	DCS	auditors
	DIDD	Department of	Department of
	Hospital	Corrections (State)	Commerce and
	MCO	Department of	Insurance
	Medicare ¹³	Health	Federal Department
	Nursing Facility	Department of	of Health and
	Office of	Homeland Security	Human Services
	Inspector General	(Through SAVE)	(DHHS)
	(OIG)	DHS	Governor's Office
		Department of	OIR
		Labor	State of Tennessee
			Legislature

¹² This section is composed of four separate lists, thus the blank lines are intentional.

¹³ Although information is received from Medicare, it is considered to be primarily a partner organization, not a supplier.

CLIENT/MEMBER STAKEHOLDER GROUP	BUSINESS PARTNERS STAKEHOLDER GROUP- SERVICE DELIVERY	SUPPLIERS STAKEHOLDER GROUP	GOVERNING ORGANIZATION STAKEHOLDER GROUP
	Revenue Cycle Management State Health Insurance Assistance Programs (SHIP) TN Bureau of Investigation, Medicaid Fraud Control Unit	Experian / Equifax Workforce Solutions (Employment and Income Verification) FFM PARIS SSA TN Benefits & Administration (Division of F&A) TN Benefits & Administration (Division of F&A)	

Table E-2 List of Client External Stakeholders

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
Advocates	Inquiry request / response	TennCare Response unit works with advocates
Advocates	Complaint request / response	Advocate for the interests of the Medicaid population sends complaint to HCFA, processed initially by TennCare Response Unit.
Applicant	Application Intake	Apply through FFM or TNHC
Applicant	Notice	Types of Notice: Return of Medicaid Packet Eligibility Determination Notice
Applicant	Provide Verification Evidence	EOG group has incoming mail and faxes for verification of application information.
Applicant	Authorized Representative Assignment	Applicant can designate an individual as their authorized representative.
Applicant	Appeal request	Applicants and enrollees in TennCare Medicaid and CoverKids may file an appeal with HCFA (through TNHC) when dissatisfied with an action taken on the individual's eligibility case.
Applicant	Appeal Hearing Scheduling	Appeal hearing scheduling is done by HCFA Eligibility Appeals, and communicated with the Appellant by mail.
Authorized Representative	Application Intake	Apply through FFM or TNHC
Authorized Representative	Notice	Types of Notice: Change in patient liability
Authorized Representative	Appeal Request	Act as though they are applicant or member

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
Authorized Representative	Appeal Hearing Scheduling	Act as though they are applicant or member
Authorized Representative	Change of Circumstance	Act as though they are member
Authorized Representative	Appeal Request	Act as though they are member
Authorized Representative	Provide Verification Evidence	Act as though they are applicant or member
Authorized Representative	Redetermination	Act as though they are applicant or member
CAC	Application Assistance	Assists applicant or authorized representative in applying through the FFM
Member	Change of Circumstance	Changes must be reported by an individual within 10 days of the changed circumstance.
Member	Inquiry, Complaints, and Grievance ¹⁴	Member reaches out to TennCare with inquiry, complaint, or grievance.
Member	Provide Verification Evidence	EOG group has incoming mail and faxes for verification of application information.
Member	Redetermination	Medicaid Agency performs redetermination of eligibility for a current member (based upon federal regulations regarding minimum time between redeterminations).
Member	Notice	Types of Notices include: <ul style="list-style-type: none"> • Eligibility determination notice • Request for additional information (needed to determine eligibility), which may also include sending

¹⁴ This includes appeals of eligibility determination decisions, as well as complaints regarding member assistance customer service and healthcare service delivery complaints that were not resolved by the applicable managed care organization.

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
		<p>forms for medical evaluation or breast/cervical cancer screening</p> <ul style="list-style-type: none"> • Change in patient liability • Packet regarding redetermination/renewal of benefits • Failure to respond/termination • Denial/need to reapply
Member	Appeal	<p>Applicants and enrollees in Medicaid and CHIP may file an appeal with agency when dissatisfied with an action taken on the individual's eligibility case. (Eligibility determinations may be appealed whether or not the individual was determined as "ineligible", because "eligible" outcomes may appeal some other aspect, such as benefits start date, aid category, medical need assessed, etc.) Members may file an appeal request through TNHC.</p>
Member	Appeal Hearing Scheduling	<p>Appeal hearing scheduling is done by HCFA Eligibility Appeals, and communicated with the Appellant by mail.</p>

Table E-3 List of Business Partner External Stakeholders

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
AAAD	Application Referral	Completes paper application for older population and adults with disabilities and delivers to EOG via TNHC
Attorney General	Litigation support	Handle cases in Chancery court and in response to lawsuits
DCS	Eligibility Determination	Eligibility determinations for children in custody, which are transmitted, to member services via ACCENT.
Department of Health	Application Referral	Provides screening services to individuals at DOH local office for BCC. Accepts applications for presumptive eligibility for pregnant women.
Department of Health	Eligibility Determination	Performs presumptive eligibility determinations for pregnant applicants only.
DHS	Match Non-MAGI applicant to SNAP participant ¹⁵	The H15 process creates a file of Non-MAGI referrals. TennCare (TCIS) preprocesses this file by identifying matches to SNAP participants.
Department of Human Services Child Support Program	Pursue third-party liability collection	HCFA Third-Party Liability (TPL) Unit works to establish paternity, and to establish and enforce medical support orders.
DIDD	Application Referral	Facilitate Medicaid eligibility for individuals seeking institutionalized Medicaid with Intellectual and Developmental disabilities. DIDD assists applicants in completing a paper application.
Hospital	Application Referral	Refer applications to HCFA related to presumptive eligibility and EMS

¹⁵ HCFA provides a file of matches, known as ‘combo cases’ to DHS for processing by DHS.

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
MCO	Application and Verification Facilitation	Through TPAES with LTSS.
Medicare	Premium Payment	The MSPs provide for payments of Medicare premiums, coinsurance, and deductibles for Medicare-covered services.
Nursing Facility	Application Referral	Send Pre-Admission Evaluation (PAE) to LTSS and handle application facilitation (similar to AAD and submitting the application to TNHC)
Nursing Facility	Coordination and Communication	Inquiries are regarding patient liability, status of applications for Item D coverage and 2350 verifications associated with long-term care services.
Nursing Facility	Status Notification	Contact EOG via the TNHC system Types include: Pre-Admission Death Notification Discharge Notification Need for LTSS
OIG	Investigate Fraud complaints	Works with TennCare, the Tennessee Bureau of Investigation, and the Attorney General's Office as a member of the TennCare Provider Fraud Task Force in combating medical provider fraud in the TennCare/Medicaid program
Revenue Cycle Management	Application Assistance	Revenue cycle managers are located within Hospitals and assist applicants with their applications.
SHIP	Inquiries	Operates a call center for Medicare questions. Individual case inquiries related to buy-ins.

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
TN Bureau of Investigation, Medicaid Fraud Control Unit	Investigate Fraud complaints	Agency charged with investigating allegations of provider healthcare fraud

Table E-4 List of Supplier External Stakeholders

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
County Incarceration Information (via Appriss developed system)	Incarceration and Release Information Verification	Receive information from counties
DCS	Custody Information	Daily batch custody files sent to iC. Affects MCO enrollment.
Department of Corrections (State)	Incarceration and Release Information Verification	Incarceration and Release Information
Department of Health	Age/Birth Verification	Access through clearing house
Department of Health	Verification of death (VOD)	Verification can be obtained electronically through Vital Statistics
Department of Homeland Security (Through SAVE)	Verifications	Lawful Presence Verification
DHS	BENDEX	Raw file (SSA)
DHS	LIS	Raw file posted on a shared folder
DHS	SVES	SVES match against SSA data that DHS will process with SSA and pass SSA response to us

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
DHS	Medicaid Report	Report includes Death Verification
Department of Labor	Verification Request	Quarterly Wage
Experian / Equifax Workforce Solutions (Employment and Income Verification)	Verification Request & Response	Equifax Workforce Solutions (Employment and Income Verification), Experian, Work Number
FFM	MAGI Eligibility Determination/Account Transfer Assessment would be future state	Weekly Flat File and “Special” file.
FFM	Referral for EMS	FFM does not determine eligibility for emergency services, but makes a referral to State to do this via account transfer processes.
FFM	Referral for Non-MAGI	H15 SFTP (Secure File Transfer Protocol) file via Account Transfer processes.
PARIS	PARIS (Public Assistant Reporting Information Systems) interface. Verification Request & Response	The Public Assistance Reporting Information System (PARIS) is a computer data matching and information exchange system administered by the Administration for Children and Families (ACF) to provide States with a tool to improve program integrity in administering public and medical assistance programs. Using the client’s SSN as the unique identifier, the files submitted by the States are matched against 3 databases: The Interstate Match (Residency and Household Composition), VA (Veterans Affairs) Match, and Federal Match.
SSA	Verification Request	Electronically verify SSN and Death Verification through State Online Query (SOLQ) online interface.

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
SSA (for SSI eligibility)	Eligibility Determination Results	Eligibility for SSI recipients daily. Online access to SOLQ to confirm information.
TN Benefits Administration (Division of F&A)	Reporting	Provider of reports to identify all State employees who have access to State Health Insurance.

Table E-5 List of Governing Organization External Stakeholders

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
CDC	Set Regulatory Policy for the CDC screening program.	Screening program is specifically for BCC.
CMS	CMS Reports	Reporting process.
CMS	Federal Funding Match	Provides matching funds for necessary programs
CMS	Set Regulatory Policy	Communicate regulatory policy to HCFA
CMS	Audit Eligibility	Audit Reporting
Comptroller and other outside auditors	Audit Eligibility	Audit Reporting
Department of Commerce and Insurance	Set Regulatory Policy	Licensing for MCO
DHHS (Federal)	Reporting	Reporting process.
DHHS (Federal)	Set Regulatory Policy	Communicate regulatory policy to HCFA
Governor's Office	Set Regulatory Policy	Communicate regulatory policy to HCFA
OIR	Set IT Policy	IT-related Policy

EXTERNAL STAKEHOLDER	INTERACTION	INTERACTION DETAILS
State of Tennessee Legislature	Set Regulatory Policy	Communicate regulatory policy to HCFA

APPENDIX F: CURRENT STATE INTERNAL STAKEHOLDERS AND INTERACTION MODELS

[Figure 8-2](#) models a consolidated view of all interactions.

[Figure F-1](#) through [Figure F-8](#) include separate views, identifying the capabilities for each functional area, and their associated interactions.

Figure F-1 EOG Operating Model

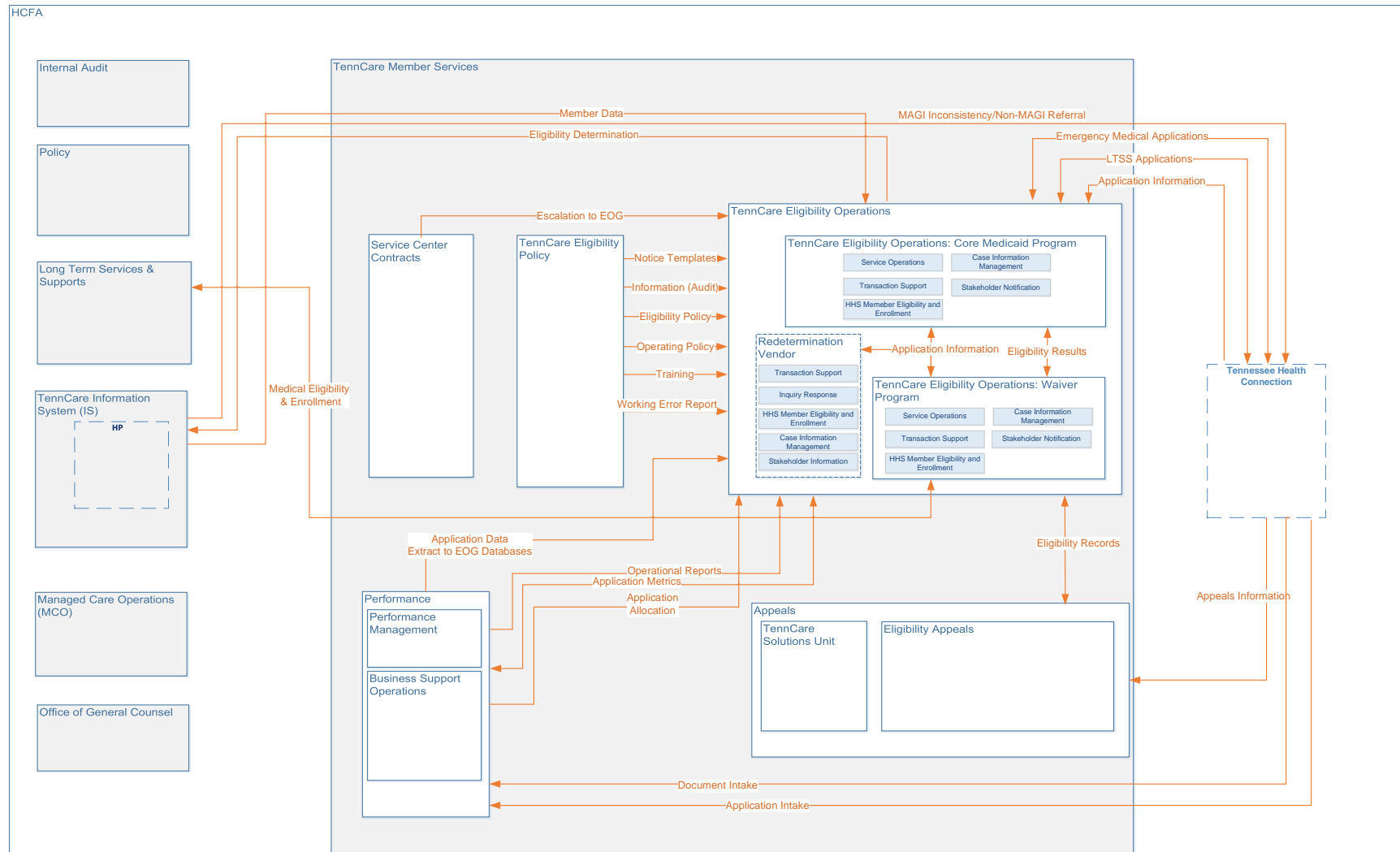


Figure F-2 TennCare Eligibility Policy Operating Model

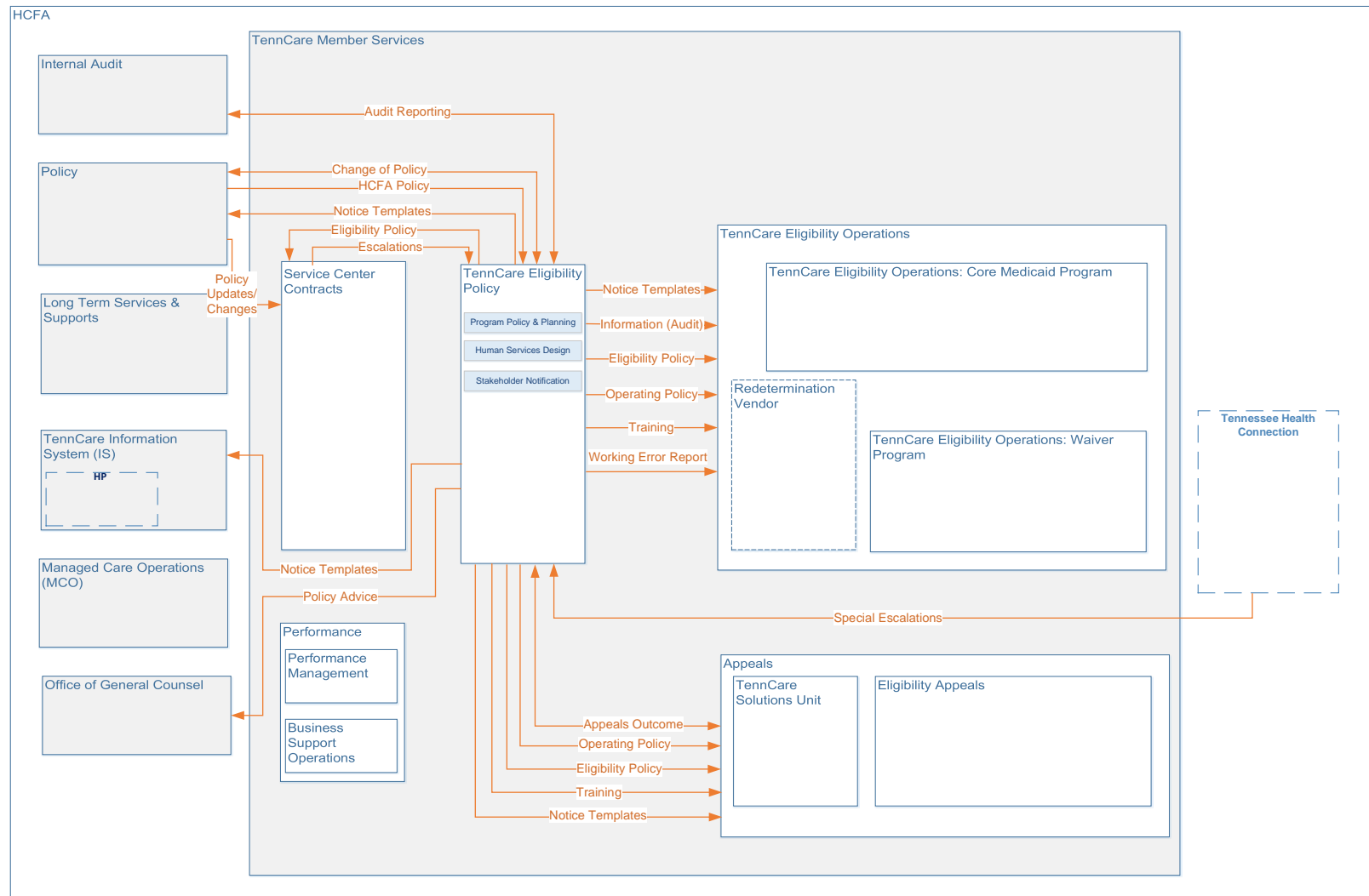


Figure F-3 Service Center Contracts Operating Model

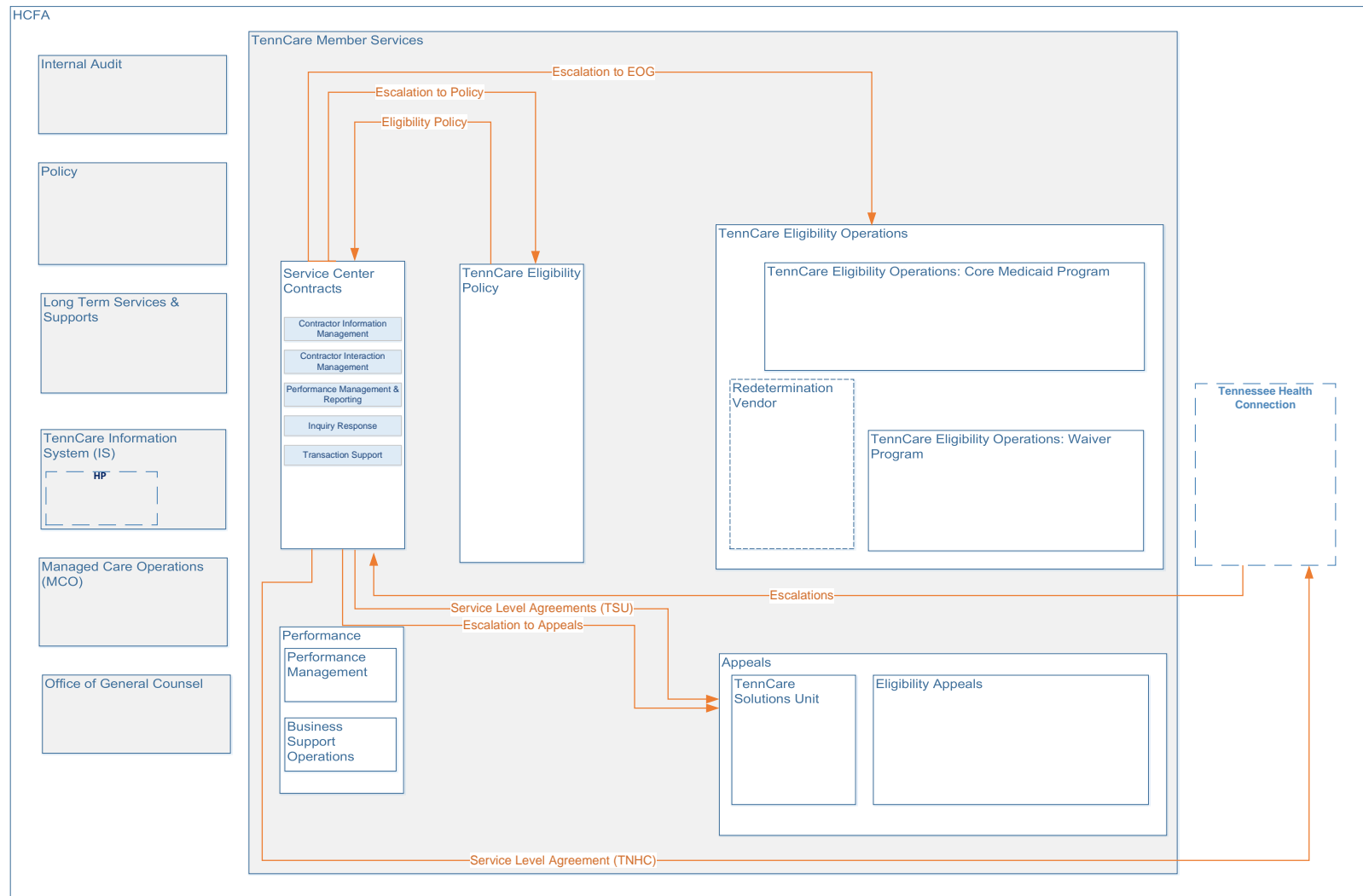


Figure F-4 Performance Management Operating Model

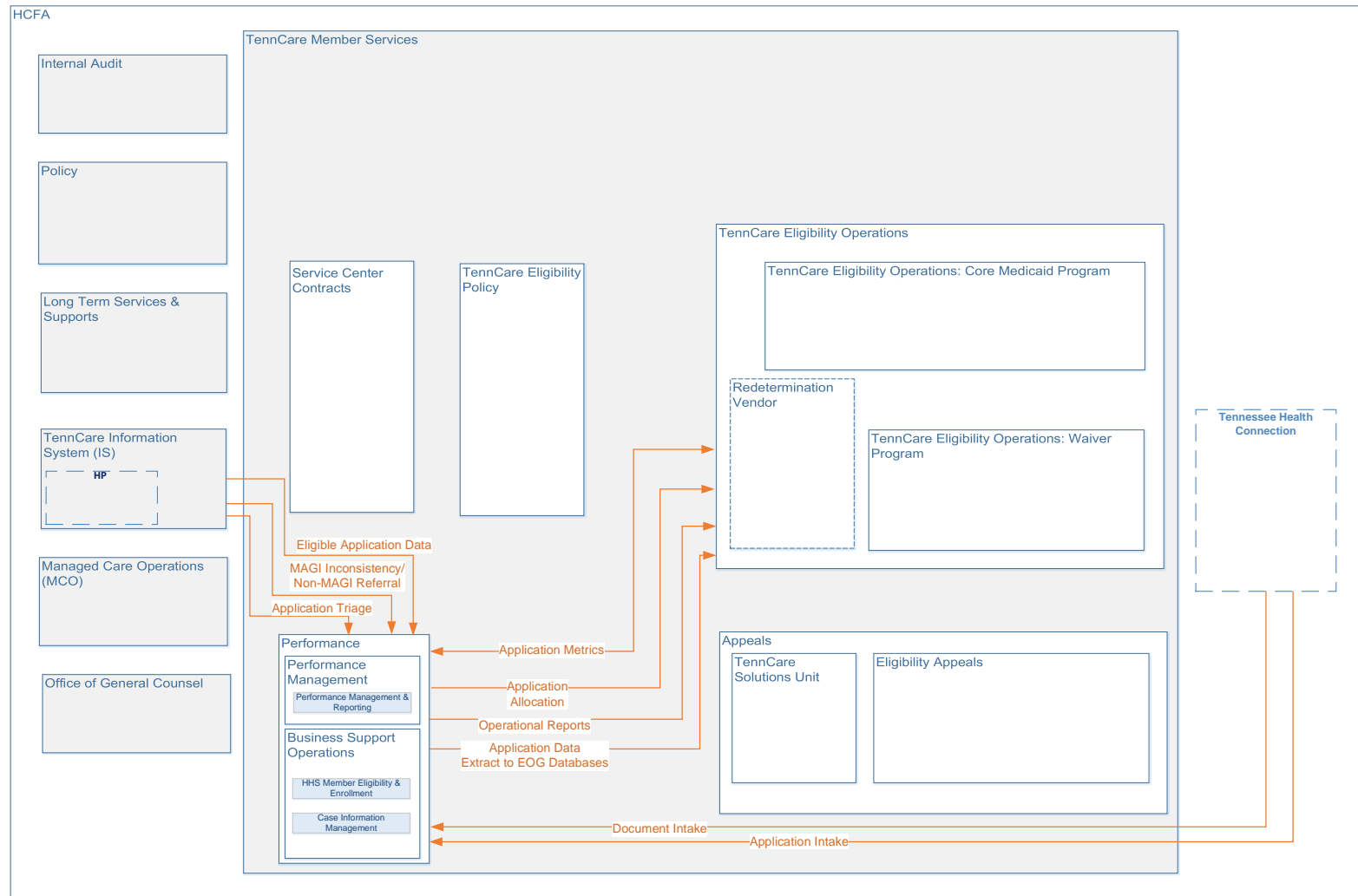


Figure F-5 Appeals Operating Model

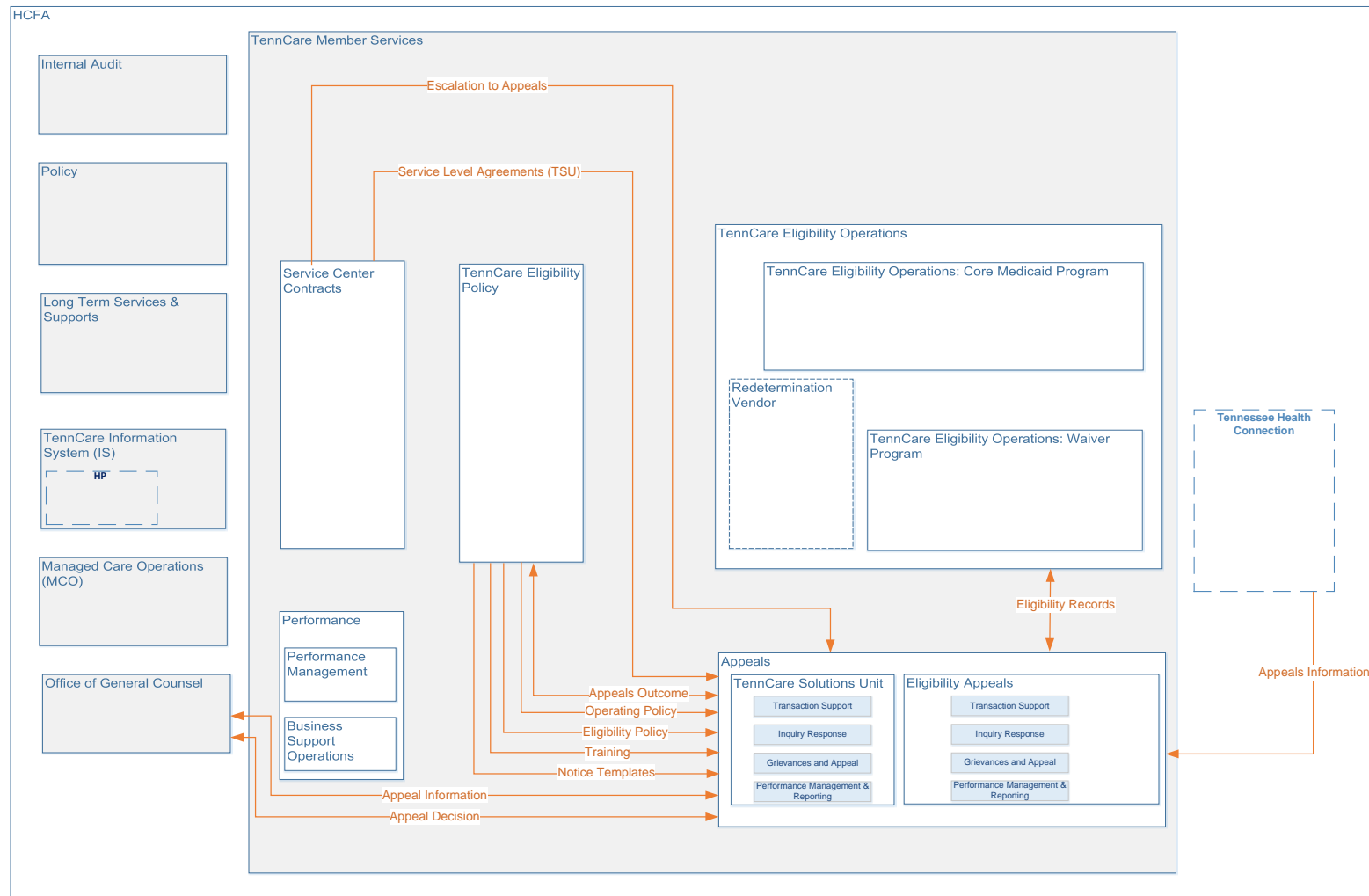


Figure F-6 Tennessee Health Connection's Operating Model

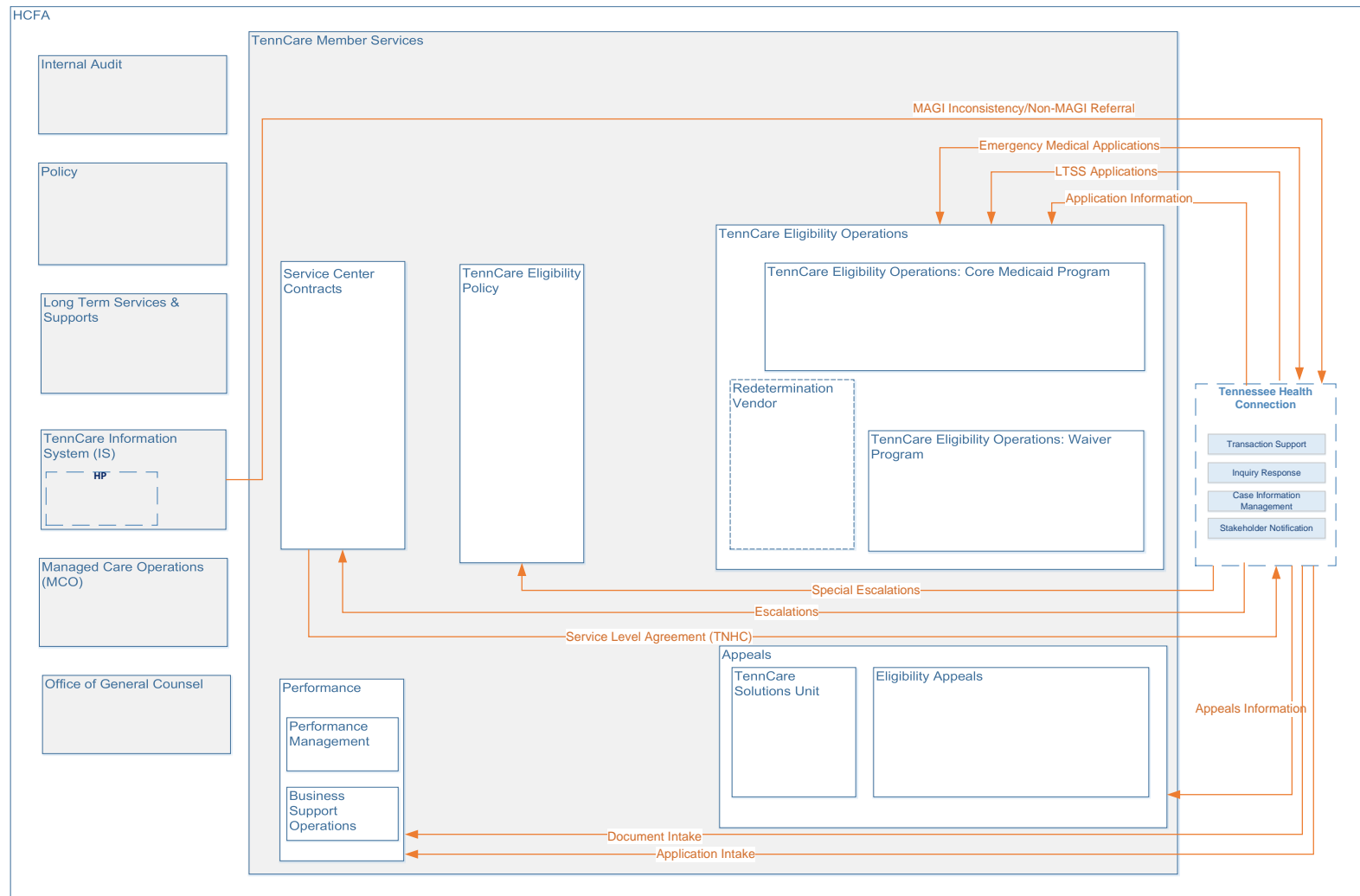


Figure F-7 TennCare Information Systems Operating Model

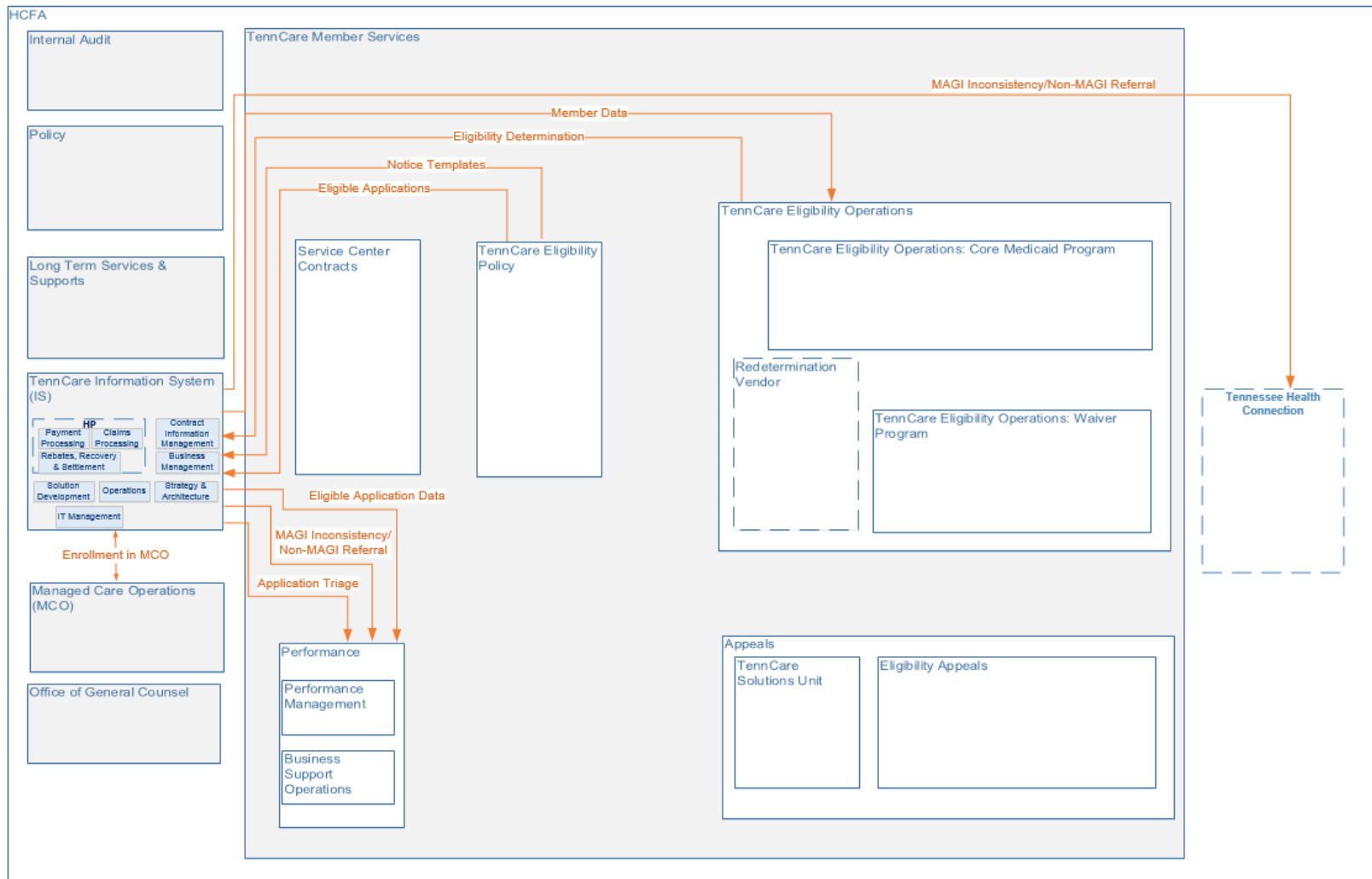
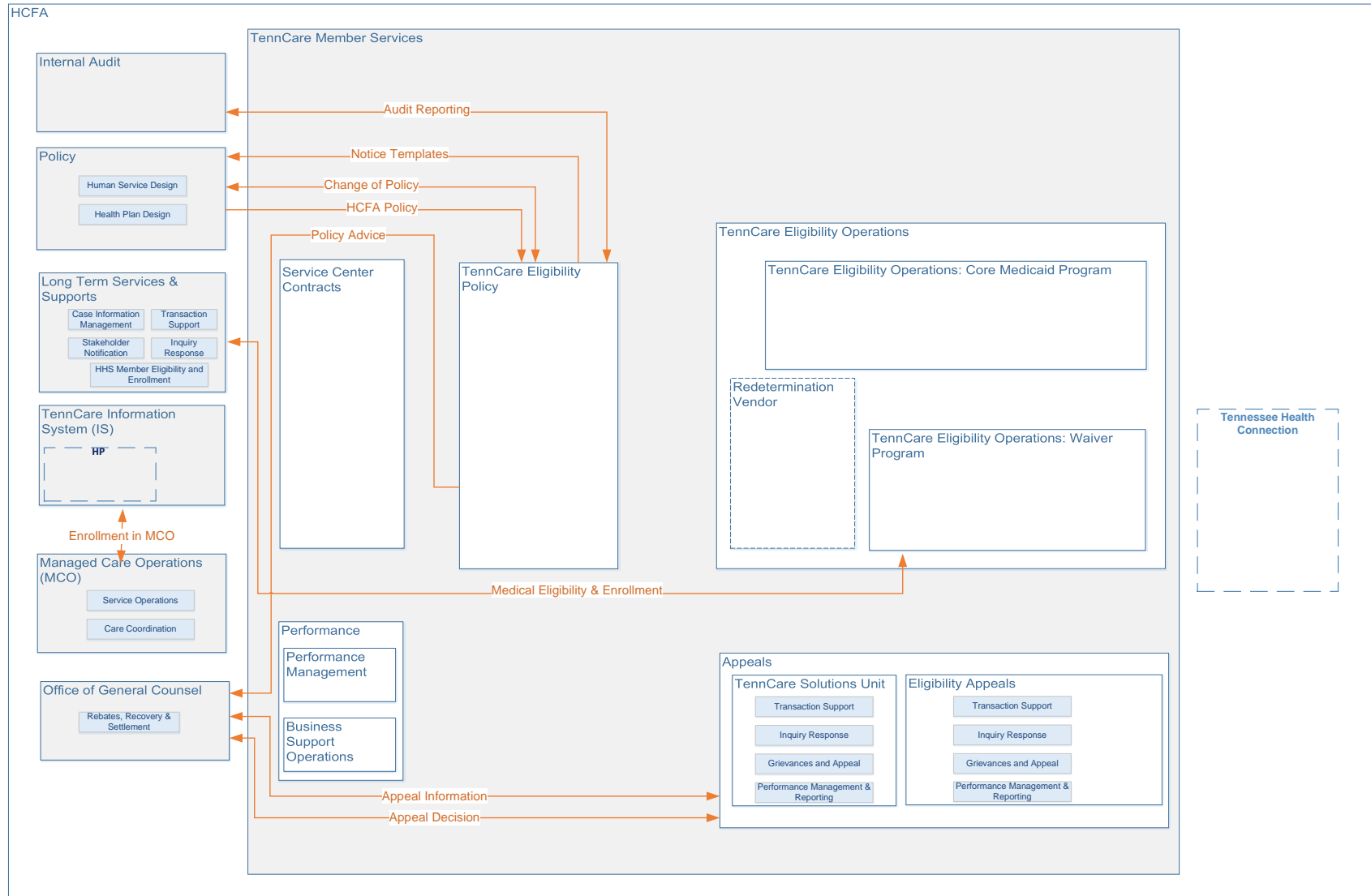


Figure F-8 Interactions – External to Member Services & Internal to HCFA



APPENDIX G: INVENTORY OF INTERACTIONS

G.1 INTERACTION GROUPS

The interactions for each Internal Stakeholder are modeled in [APPENDIX F](#): Each interaction for the stakeholders listed below is further detailed in [Figure F-1](#) through [Figure F-8](#).

Table G-1 List of Internal Stakeholders for Interaction Grouping

INTERNAL STAKEHOLDERS/INTERACTION GROUPS
Appeals
External to TennCare Member Services
LTSS
MCOs
Office of General Counsel
Performance Management
Policy
Service Center Contracts
TennCare Eligibility Policy
TennCare Eligibility Operations
TCIS
TennCare Member Services
TNHC

G.2 INVENTORY OF INTERACTIONS

Table G-2 Inventory of Interactions – Internal Stakeholder Communication Capabilities

INTERACTION	SENDER	RECEIVER	BOTH	INTERACTION SUMMARY
Appeal Decision	Appeals	Office of General Counsel	X	Appeals group sends appeal information to OGC for hearing.
Appeal Information	Appeals	Office of General Counsel	X	Appeals group sends appeal information to OGC.

INTERACTION	SENDER	RECEIVER	BOTH	INTERACTION SUMMARY
Appeal Information	TNHC	Appeals		After receiving appeal requests at TNHC, appeals information is sent to the appeals group.
Appeal Outcome	TennCare Eligibility Policy	Appeals	X	Information about the appeals outcome is shared between TennCare Eligibility Policy and appeals group.
Application Allocation	Performance Management	TennCare EOG		Performance Management sends application allocation to EOG to manage to capacity.
Application Information	Service Center Contracts	TennCare EOG		TNHC sends relevant application information to EOG.
Application Information	TennCare Eligibility Operations: Core	TennCare Eligibility Operations: Waiver	X	Application information is shared between EOG Core and EOG Waiver for verifications.
Application Information	Redetermination Vendor	TennCare Eligibility Operations: Core	X	Application information is shared between EOG Core and EOG Waiver for verifications.
Application Information	Redetermination Vendor	TennCare Eligibility Operations: Waiver	X	Application information is shared between EOG Core and EOG Waiver for verifications.
Application Information	TNHC	TennCare EOG		After application intake, TNHC sends application information to EOG.
Application Intake	TNHC	Performance Management		Applications are received in TNHC and sent to

INTERACTION	SENDER	RECEIVER	BOTH	INTERACTION SUMMARY
				Performance Management group.
Application Metrics	Performance Management	TennCare EOG	X	Performance Management sends application metrics about inconsistencies and Non-MAGI applications to EOG.
Application Triage	TCIS	Performance Management		TCIS sends application triage to Performance Management.
Audit Reporting	TennCare Eligibility Policy	Internal Audit		TennCare Eligibility Policy sends audit reporting to Internal Audit group.
Change of Policy	Policy	TennCare Eligibility Policy	X	Policy changes are shared between policy group and TennCare Eligibility Policy.
Document Intake	TNHC	Performance Management		Documents are received in TNHC and sent to Performance Management.
Eligibility Determination	TennCare Eligibility Operations	TCIS		TennCare Eligibility operations forward eligible applicants as members into the TCIS.
Eligibility Policy	TennCare Eligibility Policy	TennCare EOG		TennCare Eligibility Policy sends changes or updates to eligibility policy to EOG.
Eligibility Policy	TennCare Eligibility Policy	Appeals		TennCare Eligibility Policy sends changes and updates to eligibility policy to appeals group.
Eligibility Policy	TennCare Eligibility Policy	Service Center Contracts		TennCare Eligibility Policy group sends eligibility

INTERACTION	SENDER	RECEIVER	BOTH	INTERACTION SUMMARY
				policy updates and changes to Service Center Contracts.
Eligibility Records	TennCare EOG	Appeals	X	EOG sends eligibility records to appeals group to inform appeal decisions.
Eligible Application Data	TCIS	Performance Management		TCIS sends eligible application data to Performance Management.
Eligible Applications	TennCare Eligibility Policy	TCIS		TennCare Eligibility Policy sends eligible applications to TCIS.
Emergency Medical Applications	TNHC	TennCare EOG		TNHC sends emergency services applications to EOG.
Enrollment in MCO	TCIS	MCO		TCIS sends enrollment information to MCO.
Escalation	Service Center Contracts	TennCare Eligibility Policy		If Service Center Contracts are unable to address escalations received from TNHC, then escalations are sent to TennCare Eligibility Policy, EOG, and Appeals.
Escalations	TNHC	Service Center Contracts		TNHC sends escalations to Service Center Contracts.
HCFA Policy	Policy	TennCare Eligibility Policy		Policy group sends new policy to TennCare Eligibility Policy group.
HCFA Policy	Policy	TennCare Eligibility Policy		Workgroups generating HCFA policy share information with workgroups responsible for TennCare enrollment policy.

INTERACTION	SENDER	RECEIVER	BOTH	INTERACTION SUMMARY
Information (Audit)	TennCare Eligibility Policy	TennCare EOG		TennCare Eligibility Policy sends audit information to EOG.
LTSS Applications	TNHC	TennCare EOG		TNHC sends LTSS Applications to EOG.
MAGI Inconsistency / Non-MAGI Referral	TCIS	Performance Management		TCIS sends inconsistencies and Non-MAGI referrals that are received from FFM to Performance Management.
MAGI Inconsistency / Non-MAGI Referral	TCIS	TNHC		TCIS sends inconsistencies and Non-MAGI referrals that are received from FFM to THC for outreach to applicant.
Medical Eligibility & Enrollment	LTSS	EOG: Waiver	X	EOG makes the determination, sends the decision to LTSS. If eligible, LTSS does the enrollment.
Member Data	TCIS	TennCare EOG		TCIS sends member data TennCare EOG.
Notice Templates	TennCare Eligibility Policy	TennCare EOG		TennCare Eligibility Policy sends notice templates to EOG for standard noticing to members and applicants.
Notice Templates	TennCare Eligibility Policy	Appeals		TennCare Eligibility Policy sends notice templates to appeals group for standard noticing to members and applicants.

INTERACTION	SENDER	RECEIVER	BOTH	INTERACTION SUMMARY
Notice Templates	TennCare Eligibility Policy	TCIS		TennCare Eligibility Policy sends notice templates to TCIS for standard noticing to members and applicants.
Notice Templates	TennCare Eligibility Policy	Policy		Policy approves notice templates, including Eligibility Notices, Return of Medicaid Packet, Pending Application Notice, LTSS Information Request Notice, State Beneficiary Notice, and Change in Patient Liability Notice.
Operating Policy	TennCare Eligibility Policy	TennCare EOG		TennCare Eligibility Policy sends changes or updates to operating policy to EOG.
Operating Policy	TennCare Eligibility Policy	Appeals		TennCare Eligibility Policy sends changes and updates to operating policy to appeals group.
Operational Reports	Performance Management	TennCare EOG		TCIS sends operational reports to TennCare EOG.
Policy Advice	TennCare Eligibility Policy	Office of General Counsel	X	OGC and TennCare Eligibility Policy share policy advice.
Service Level Agreements (TNHC)	Service Center Contracts	TNHC		Service Center Contracts sends service level agreements to TNHC.
Service Level Agreements (TSU)	Service Center Contracts	Appeals: TSU		Service Center Contracts sends service level agreements to TSU within appeals group.

INTERACTION	SENDER	RECEIVER	BOTH	INTERACTION SUMMARY
Special Escalations	TNHC	TennCare Eligibility Policy		TNHC sends special escalations on ad hoc basis to TennCare Eligibility Policy
Training	TennCare Eligibility Policy	Appeals		TennCare Eligibility Policy sends training requirements and information to appeals group.
Training	TennCare Eligibility Policy	TennCare EOG		TennCare Eligibility Policy sends training requirements and information to EOG.
Working Error Report	TennCare Eligibility Policy	TennCare EOG		TennCare Eligibility Policy sends working error report to EOG.

APPENDIX H: CURRENT INVENTORY OF HCFA RELEVANT APPLICATIONS

Technical staff members assessed the 30 applications of the current HCFA IT environment, using 26 attributes aligned with the MITA framework. Due to the size of the file, data is divided across five subtables. This table contains numerous intentional blank cells, which indicate information for that particular attribute either does not exist or was not timely available to include in the inventory.

Table H-1 Inventory of Applications – Description

APPLIC ATION ID	APPLICATION NAME	APPLICA TION ACRONY M	APPLICATION STATUS	SYSTEM REPLACEMENT	SHORT DESCRIPTION
APP001	Tennessee Pre-Admission Eligibility System	TPAES	In production	Yes, development currently underway	Tennessee Pre-Admission Eligibility System (TPAES) is the Pre-Admission Eligibility System for Tennessee's long-term care and support (LTSS) programs.
APP-002	Tennessee Eligibility Appeals Management System	TEAMS	In production		TEAMS is a case management system used to track eligibility appeals from initiation to resolution. (It does not have workflow capabilities.)
APP-003	ProLaw	N/A	In production	This System will be replaced by the new System	ProLaw is the application used to track Medical Appeals from initiation to resolution. Medical appeals capability will not be within scope for the TEDS project.
APP-004	interChange	iC	In production	This System will not be replaced by the new Eligibility System	This is the MMIS and it is operated by HP. The system supports the TennCare's MCO business model.
APP-005	Automated Client Certification and Eligibility Network for Tennessee	ACCENT	In production	ESM (Enterprise System Modernization) will replace ACCENT in 2–3 years	ACCENT is a mainframe-based system that supports eligibility and case management functionalities for SNAP, TANF, and Medicaid. ACCENT does not support MAGI determination. Currently the State relies on FFM for MAGI determination.

APPLICATION ID	APPLICATION NAME	APPLICATION ACRONYM	APPLICATION STATUS	SYSTEM REPLACEMENT	SHORT DESCRIPTION
APP-008	TNAnytime.org		In production	This System will not be replaced by the new Eligibility System	A Web-based system that is used by providers to inquiry eligibility status (backend is iC)
APP-009	EOG Core, Special, and Waiver DB		In production	This System will be replaced by the new Eligibility System	An Access database that is used to track the Non-MAGI applications received from the FFM, TNHC, and SSA
APP-010	MAGI DB		In production	This System will be replaced by the new Eligibility System	An Access database that is used to account for applications received and track eligibility-related activities for the MAGI applications with inconsistencies received from the FFM.
APP-011	CMS Lookup DB		In production	This System will be replaced by the new Eligibility System	A searchable Access database used by Resolution Specialists and others in Appeals to search for an application in the most recent CMS Data Flat File. This DB also matches the most recent CMS Data Flat File with the newest SNAP extract from DHS and contains H15 records
APP-012	CMS Historical DB		In production	This System will be replaced by the new Eligibility System	An Access database linked to 11 other databases that contain all of the CMS Data Flat Files received since 12/20/2013. Used for a weekly Application Processing Delay Appeal and Comprehensive Inventory of Records (APDA CIR) match. Note: APDA CIR contains field-level data elements from every record field from the APDA queue within that system, and the APDA queue contains all cases related to appeals falling under the class action standard of the Wilson v. Gordon case. The APDA CIR matches appeals received against application records transmitted to the state in the CMS Database to return matches and confirm that an application was indeed received and provide a date for determining whether it was in fact delayed beyond the 45-day processing threshold.
APP-013	IBM Business Process Management	BPM	Procured	n/a	BPM was procured for TPAES replacement program. HCFA considered options for continued operation and enhancement of the program, as well as integration with the MMIS. As a result, BPM was purchased. However, it has not been installed yet.

APPLICATION ID	APPLICATION NAME	APPLICATION ACRONYM	APPLICATION STATUS	SYSTEM REPLACEMENT	SHORT DESCRIPTION
APP-014	IBM FileNet		In production	This System will not be replaced by the new Eligibility System	This system is used for store and index scanned documents and applications
APP-015	SAS		In production	This System will not be replaced by the new Eligibility System	SAS is HCFA's data analytics platform managed by HP. The data in the data warehouse is MMIS data.
APP-016	SAP Business Objects		In production	This System will not be replaced by the new Eligibility System	SAP BI tools is a suite of front to end applications that allows users to view, sort, and analyze data. HCFA Data warehouse used for fraud analysis.
APP-017	Corticon	BRMS	Planned	This System will not be replaced by the new Eligibility System	Corticon Automated Business Rules Engine was procured for TPAES replacement program. It provides an advanced business rules management and runtime engine capability to HCFA. Multiple options for continued operation and enhancement as well as integration with the MMIS were considered. As a result, Corticon was purchased. It is in process of deployment and final verification of configuration, the last step before production. Development using it is already underway for multiple projects in LTSS and MMIS.
APP-018	IBM Integration Bus	IIB	In production	n/a	HCFA's interoperability platform
APP-019	IBM Initiate Enterprise Master Person Index	EMPI	Planned	n/a	EMPI is a flexible tool that helps resolve patient and provider identity across disparate systems.
APP-021	Oracle Identity and Access Management	IdAM	Planned	n/a	Oracle IdAM allows users to effectively manage the end-to-end user identities across the enterprise, both beyond and within the firewall and into the cloud.

APPLICATION ID	APPLICATION NAME	APPLICATION ACRONYM	APPLICATION STATUS	SYSTEM REPLACEMENT	SHORT DESCRIPTION
APP-022	Oracle Audit Vault		In production	n/a	Oracle Audit Vault consolidates audit data from different sources including databases, operating systems, and directories. It is a highly accurate SQL-based technology with high security level.
APP-023	IBM WebSphere Service Registry and Repository (WSRR)	IBM WSRR	Planned	n/a	IBM WSRR provides services registry and repository functions for service-oriented architecture (SOA) enterprise applications. It runs as a JAVA Enterprise Application on IBM WSRR Application Server, which is used in a Service-oriented architecture.
APP-024	IBM Content Manager On Demand	CMOD	In production	n/a	IBM Content Manager On Demand captures and stores large volume of outbound and correspondences; it also optimize and automate storage management, as well as a platform for electric bill and payment solutions
APP-026	Account Transfer Process	ATP	Planned		Given delays in the Eligibility System deployment schedule, HCFA executed an eligibility determination contingency plan to receive MAGI Applicant Eligibility Determinations and Non-MAGI Applications (Account Transfers) from the FFM and continued to use ACCENT to process un-adjudicated applications.
APP-028	HP Exstream / Command Center	n/a	In production	This enterprise application can be used by the new Eligibility system. (they would have their own instance)	Document management system that creates notification letters from iC data. The capabilities of this application can be used for other solutions outside of iC (such as TEDS). Exstream is where you design the templates and then you run it through Command Center to generate the notices.
APP-029	CoverTENN interfaces		Planned	Out of Scope – This System will not be replaced by the new Eligibility System	Cover Tennessee was developed to create health insurance options that are affordable and portable, and meet the needs of the uninsured within Tennessee. Cover Tennessee has three programs. CoverKids offers free comprehensive health coverage to qualifying uninsured children in Tennessee, age 18 and younger with a family household income less than 250 percent of the federal poverty level.
APP-030	Serena Business Manager	SBM	In production	TBD – This System is planned to be replaced by the IBM BPM	SBM employs a three-tier configuration that consists of the SBM Server, the database server, and one or more client machines. The SBM Server is implemented using J2EE and ISAPI extensions.

Table H-2 Inventory of Applications – Business Attributes

APPLIC ATION ID	BUSINE SS OWNER	IT OWNER	PROGRAM SUPPORTED	COTS/CUSTO M BUILD	BUSINESS CAPABILITIES/FUNCTIONS SUPPORTED	MISSION CRITICA L (Y/N)	USER GROUPS
APP-001	Julie Johnson	Max Arnold	TPAES Replacement	Purchased from Vendor, HP	Receives statewide Web-based submission of PAE applications and screenings. An approved PAE is required to determine financial eligibility for Medicaid (category requirement for HCBS) and authorization of long-term care. Decisions are conveyed to MCOs for care management purposes and approvals are manually entered in MMIS. Eligibility Determination - Yes Case Management-Yes and Information Management-Yes	Y	Internal-HCFA LTSS, HCFA Member Services (EOG and Eligibility Appeals Unit), HCFA Office of General Counsel. External-Managed Care Organizations, 9 Area Agencies on Aging and Disability, nursing homes, hospitals, sister state agencies, Ascend contractor
APP-002	Tracy Purcell	John Hennessey/Glen Baggett	Eligibility Appeals			Y	
APP-003	Tracy Purcell	John Hennessey / Glen Baggett	Medical Appeals			Y	
APP-004	Ken Barker	Ken Barker		Custom Build	Supports all Recipient Data and inquiries. Supports all Provider Data. Supports all Claims Data and Claims Data Processing, includes all Encounter, Fee For Service and Cross Over Claims	Y	Both
APP-005	Keisha Malone	Carol Brown	SNAP, TANF, Non-MAGI Medicaid	Transfer from another State with modifications	TANF, SNAP, Medicaid eligibility determination. Benefit issuance for SNAP and TANF. Case Management and Appointment for TANF and	Y	3100 Family Assistance staff, 1900 outside agency inquirers, 400 providers, 150 State Office staff (including technical staff), 200 Appeals workers, Other

APPLICATION ID	BUSINESS OWNER	IT OWNER	PROGRAM SUPPORTED	COTS/CUSTOM BUILD	BUSINESS CAPABILITIES/FUNCTIONS SUPPORTED	MISSION CRITICAL (Y/N)	USER GROUPS
					SNAP. Federal and State Reporting. Claims Online Tracking for SNAP and TANF is a subsystem of ACCENT.		Child Care, Voter Registration, Investigative Services and Fiscal staff
APP-008	Gary Morgan	Andy Akins					
APP-009	Tracy Purcell	Scott Hiatt					
APP-010	Tracy Purcell	Scott Hiatt					
APP-011	Tracy Purcell	Scott Hiatt					
APP-012	Tracy Purcell	Scott Hiatt					
APP-013	Max Arnold	Scott Hiatt					
APP-014	Max Arnold	Max Arnold	Enterprise wide	IBM FileNet P8 4.5.1	No-Eligibility Determination, Yes-Case Management, Yes-Information Management.	Y	Both

APPLICATION ID	BUSINESS OWNER	IT OWNER	PROGRAM SUPPORTED	COTS/CUSTOM BUILD	BUSINESS CAPABILITIES/FUNCTIONS SUPPORTED	MISSION CRITICAL (Y/N)	USER GROUPS
APP-015	Wesley Thompson	Wesley Thompson					
APP-016	Don Oaks	Wesley Thompson					
APP-017	Max Arnold	Max Arnold	LTSS / MMIS / Data Warehouse / HIE / General SOA infrastructure usage	COTS	Automated Business Rules Engine	Y	Internal
APP-018	Max Arnold	Erik Bock					
APP-019	Max Arnold	Erik Bock					
APP-021	Victor Patuzzi	Victor Patuzzi					
APP-022	Scott Hiett (ATP) George Beckett (HIE)	Victor Patuzzi					

APPLICATION ID	BUSINESS OWNER	IT OWNER	PROGRAM SUPPORTED	COTS/CUSTOM BUILD	BUSINESS CAPABILITIES/FUNCTIONS SUPPORTED	MISSION CRITICAL (Y/N)	USER GROUPS
APP-023	Max Arnold	Erik Bock					
APP-024	Max Arnold	Ken Barker		COTS	Reporting and document manager report storage and retrievals	Y	Both
APP-026	Tracy Purcell	Scott Hiett					
APP-028	Ken Barker	Ken Barker		COTS	Generation of member services letters (eligibility, enrollment and LTSS)	Y	Member Services (Internal only) has access, but typically HP only.
APP-029	Maximus	Maximus					
APP-030	Doug Erwin	Doug Erwin					

Table H-3 Inventory of Applications – Operating Attributes

APPLIC ATION ID	# OF USER S	FAILOVE R AVAILAB LE? (Y/N)	ANNUAL TRANSACTION VOLUME	YEAR FIRST DEPLOYED	QTY INTERF ACES (APP TO APP)	INTERFACE DETAILS	LAST DISASTER RECOVERY PROGRAM PERFORMED
APP-001	1644	unknown	\$102,012.00	2009	TN Anytime	Retrieves member MCO assignment from TNAnytime to populate TPAES	unknown
APP-002	670	y	100,000 +	2014	1		
APP-003	220	N	100,000 +	Before 2008	1		
APP-004	300	Y	30NM Batch and real time, eligibility, all claims, TPL, Remittance Advice, Capitation, others	2004	30	Windows PowerBuilder, SAMBA, SFTP, FTP	9/7/2015
APP-005	6800	Y	756000000	1992	17	SSA (BENDEX, SSI, SOLQ, Prisoner, Annual Death, SVES) TennCare (Transaction, SSA, SCHIP Citizenship, CoverKids) DOL (Wages, Unemployment, WOTC, VOS One-Stop for E&T) DOH (WIC, Vital Statistics, Birth), TennCare CoverKids, Fiscal Information Staff (for SNAP and TANF EBT), Comptroller (Tax Relief, Voter Registration) Phone Companies (Lifeline) DOE (School Lunch program)	3/1/2015 Transition to the IBM Boulder, Colorado data center. State Agencies used Disaster Recovery Program to transition to the IBM data center. Annual Disaster Recovery Test is scheduled for 12/15/2015 and 12/16/2015.
APP-008							

APPLICATION ID	# OF USERS	FAILURE AVAILABLE? (Y/N)	ANNUAL TRANSACTION VOLUME	YEAR FIRST DEPLOYED	QTY INTERFACES (APP TO APP)	INTERFACE DETAILS	LAST DISASTER RECOVERY PROGRAM PERFORMED
APP-009							
APP-010							
APP-011							
APP-012							
APP-013							
APP-014	100+	Y	4.5 million documents stored. 500,000+ retrievals	2005 – Prior Version, 2012 Current version	3	Direct integration with Siebel. Users view images stored in FileNet from within the Siebel application. Indirect integration with Recognition Research Inc. (RRI) Scan system. Scanned files are sftped to the FileNet server. Indirect integration with iC. Letter files are sftped to the FileNet server.	unknown
APP-015							

APPLICATION ID	# OF USERS	FAILOVER AVAILABLE? (Y/N)	ANNUAL TRANSACTION VOLUME	YEAR FIRST DEPLOYED	QTY INTERFACES (APP TO APP)	INTERFACE DETAILS	LAST DISASTER RECOVERY PROGRAM PERFORMED
APP-016							
APP-017	10 +	Y	Expected: LTSS thousands MMIS millions HIE millions	2015 (0)	2, access only by standard service call or by EJB, no custom interfaces allowed	1) SOAP Service Based 2) Enterprise Java Bean (EJB) Based 3) Corticon Developer WorkStation	not yet in production
APP-018							
APP-019							
APP-021							
APP-022							

APPLIC ATION ID	# OF USER S	FAILOVE R AVAILAB LE? (Y/N)	ANNUAL TRANSACTION VOLUME	YEAR FIRST DEPLOYED	QTY INTERF ACES (APP TO APP)	INTERFACE DETAILS	LAST DISASTER RECOVERY PROGRAM PERFORMED
APP-023							
APP-024	30	Y	800,000	2011	2	iC and User	9/7/2015
APP-026							
APP-028	<10	Y	approximately 2 million letters/notices generated per year	2014	3	iC, databases and User	9/7/2015
APP-029							
APP-030							

Table H-4 Inventory of Applications – COTS Attributes

APPLIC ATION ID	APPLICATION PLATFORM	COTS PRODUC T NAME	COTS PRODUCT VERSION	COTS LICENSE EXPIRES	DATABASE
APP-001	unknown	Serena	unknown	unknown	unknown
APP-002	Windows Server 2012/ MS SQL Server 2012				MS SQL
APP-003	Windows Server 2003/ MS SQL Server 2000* (Working on moving to Win2012/SQL 2012)				MS SQL
APP-004	Sun Solaris	N/A	N/A	N/A	Oracle
APP-005	IBM Mainframe in Boulder	N/A	N/A	N/A	IBM Mainframe System
APP-008					
APP-009					
APP-010					

APPLICATION ID	APPLICATION PLATFORM	COTS PRODUCT NAME	COTS PRODUCT VERSION	COTS LICENSE EXPIRES	DATABASE
APP-011					
APP-012					
APP-013					
APP-014	J2EE	IBM FileNet P8	4.5.1	12/31/15. Quote for 1-year renewal has been received and is being processed.	Oracle
APP-015					
APP-016					
APP-017	RHEL	Progress Corticon	5.4.1	May of 2018	N/A for the product itself, but can connect to any Open Database Connectivity (ODBC)/ Java Database Connectivity (JDBC) database as part of operating

APPLIC ATION ID	APPLICATION PLATFORM	COTS PRODUC T NAME	COTS PRODUCT VERSION	COTS LICENSE EXPIRES	DATABASE
APP-018					
APP-019					
APP-021					
APP-022					
APP-023					
APP-024	Windows, Admin Tools	Content Manager On Demand (CMOD)	8.5.1 , 9.XX	N/A	Oracle
APP-026					

APPLICATION ID	APPLICATION PLATFORM	COTS PRODUCT NAME	COTS PRODUCT VERSION	COTS LICENSE EXPIRES	DATABASE
APP-028	Windows	HP Exstream Command Center	Exstream 8.0 Command Center 2.x	10/1/2016	Oracle
APP-029					
APP-030					

Table H-5 Inventory of Applications – Level of Effort Required to Maintain

APPLICATION ID	LOE SUPPORT (LAST 12 MONTHS)	LOE FOR BACKLOG ISSUES/ENHANCEMENTS	OUTAGES IN LAST 12 MONTHS	SHARES INFORMATION WITH THESE OFFICES:	ONGOING OPERATING COSTS – INFRASTRUCTURE	ONGOING OPERATING COSTS – SOFTWARE	ONGOING OPERATING COSTS – LABOR
APP-001	1 person 2,080 hours	1 person 3000 hours	none	HCFA Member Services	N/A	N/A	N/A
APP-002	3000+	800	<8	TennCare			

APPLIC ATION ID	LOE SUPPORT (LAST 12 MONTHS)	LOE FOR BACKLOG ISSUES/ENHANCEMENTS	OUTAGES IN LAST 12 MONTHS	SHARES INFORMA TION WITH THESE OFFICES:	ONGOING OPERATING COSTS – INFRASTRU CTURE	ONGOING OPERATING COSTS – SOFTWARE	ONGOING OPERATING COSTS – LABOR
APP-003	2000+	200	> 40	TennCare			
APP-004	960,000	150,000	12	DOH, DHS, Other	N/A	N/A	32MM/ All Services
APP-005	23 State FTEs and 3 contract FTEs (Managers, analysts, developers, and testers) support ACCENT and COTS.	23 State FTEs and 3 contract FTEs (Managers, analysts, developers, and testers) support ACCENT and COTS.	8 hours	TennCare and DCS	N/A	135, 000 per month 1,620,000 annual estimate	3,000,000 estimated annual cost for salaries and benefits
APP-008							
APP-009							
APP-010							
APP-011							

APPLIC ATION ID	LOE SUPPORT (LAST 12 MONTHS)	LOE FOR BACKLOG ISSUES/ENHANCEMENTS	OUTAGES IN LAST 12 MONTHS	SHARES INFORMA TION WITH THESE OFFICES:	ONGOING OPERATING COSTS – INFRASTRU CTURE	ONGOING OPERATING COSTS – SOFTWARE	ONGOING OPERATING COSTS – LABOR
APP-012							
APP-013							
APP-014	3 full time system administrators/developers	No enhancements pending at this time. Product upgrade to version 5.2.1 is in progress.	< 5 hours	HCFA wide	14 physical standard OIR Windows servers, 10 virtual standard OIR Windows servers, 2 Hitachi Healthcare Data Integration (HDI)/Health care Claims Processing (HCP) systems.		3 full time system administrators /developers
APP-015					\$998,179.00		

APPLIC ATION ID	LOE SUPPORT (LAST 12 MONTHS)	LOE FOR BACKLOG ISSUES/ENHANCEMENTS	OUTAGES IN LAST 12 MONTHS	SHARES INFORMA TION WITH THESE OFFICES:	ONGOING OPERATING COSTS – INFRASTRU CTURE	ONGOING OPERATING COSTS – SOFTWARE	ONGOING OPERATING COSTS – LABOR
APP-016							
APP-017	25 Sys Admin hours	40 Sys Admin hours until full production	0	HCFA wide	7 standard OIR servers @ approx \$500/per server per month, 5 in various test environments and 2 in production environment	server, data access plug in and developer workstation maintenance paid as part of purchase for 3 years	standard shared sys admin time for SOA infrastructure administration Approx 40 hours per year estimated after production stable
APP-018							
APP-019							
APP-021							
APP-022							

APPLIC ATION ID	LOE SUPPORT (LAST 12 MONTHS)	LOE FOR BACKLOG ISSUES/ENHANCEMENTS	OUTAGES IN LAST 12 MONTHS	SHARES INFORMA TION WITH THESE OFFICES:	ONGOING OPERATING COSTS – INFRASTRU CTURE	ONGOING OPERATING COSTS – SOFTWARE	ONGOING OPERATING COSTS – LABOR
APP-023							
APP-024	14,400	N/A	2	DOH, DHS, Other	N/A	N/A	N/A
APP-026							
APP-028	2500	included in iC Number above	8	none	unknown	N/A	N/A
APP-029							
APP-030							

APPENDIX I: WORKSHOP TOPICS AND PARTICIPANTS

I.1 WORKSHOP SESSIONS

The Business Requirements Document is an output of HCFA collaborative workshops.

Table I-1 Collaboration Workshop Sessions

TITLE	SESSION DATES	GOAL/ACCOMPLISHMENTS
Workshop 1 – Guiding Principles and Visioning	9/15/2015	Create and adopt guiding principles for TEDS with full alignment to the vision, goals, and priorities for the State of Tennessee’s Medicaid Modernization Effort.
Workshop 2 – Current State External and Internal Interactions and Challenges, Organization Structure and Business Services	9/23/2015 9/24/2015	Confirm and receive feedback on TAS consultant’s understanding of current Member Services business with respect to external interactions and challenges.
Workshop 3 – Current State Business and Technical Capabilities and Interactions	9/29/2015 10/6/2015	Confirm and receive feedback on TAS consultant’s understanding of the Business Capability Model and Software Services Model and TAS consultant’s mapping of the existing TN Systems to Business Capabilities and Software Services.
Workshop 4 – Future State Intake Processes	10/8/2015	Reviewed future state guiding principles and vision, discussed current state channels and associated challenges, evaluated modernized channels and intake operations, and identified assumptions and constraints.
Technical Conference – Survey of Systems and Applications	10/9/2015	Meeting of technical staff to inventory the current state of systems and applications that support eligibility and enrollment processes. (Results in G.1) This information and technical analysis was used to determine the technical value assessment in evaluating systems for reuse in the future state.

TITLE	SESSION DATES	GOAL/ACCOMPLISHMENTS
Workshop 5 – Future State: Appeals Processes & Business Capabilities	10/13/2015 and 10/20/2015	Discussed current challenges associated with appeals process, discussed modernized appeals operations, identified assumptions and constraints, and discussed future state business process groupings and capabilities.
Workshop 6 – Future State: Eligibility Determination	10/13/2015, 10/15/2015 and 10/22/2015	Discussed modernized eligibility determination operations, identified assumptions and constraints, discussed high-level requirements and business capabilities associated with modernized eligibility determination operations.
Workshop 7 – Business Value / Technical Quality Analysis & Future State Architecture	10/26/2015	Discussed BVTQ analysis of all systems and platforms that have been assessed for capability alignment with the future state.
Workshop 8 – Portfolio of Business and Technology Projects / Project Implementation Strategies	11/2/2015	Reviewed and discussed future state program priorities and dependencies, discussed and reviewed project groupings to be included in new TEDS roadmap, discussed and reviewed organization of projects and implementation strategies to be included in the TEDS roadmap.
Workshop 9 – Future State Roadmap	11/5/2015	Reviewed and discussed TEDS roadmap, highlighting key milestones, based on participant feedback.
Workshop 10 – Business Process Activity Flows & Functional Requirements	12/1/2015	Introduced the business process flows, using reference model architecture.
Workshop 11 – Process Flows for Intake, Eligibility Determination and Redetermination	12/3/2015, 12/8/2015 and 12/10/2015	Discussed and developed process flows, identifying activities and the sequence/inter-relationships between activities. The Intake process was decomposed for all channels. The eligibility process was decomposed to sequence activity groups.

TITLE	SESSION DATES	GOAL/ACCOMPLISHMENTS
Workshop 12 – (Sessions A, B & C) Case Management, Enrollment and Disenrollment	12/15/2015, 12/17/2015 and 1/5/2016	Discussed and developed process flows, identifying activities and the sequence/inter-relationships between activities. Activities for ongoing case management were identified. Generation of eligibility determination notices and transfer to enrollment data store were discussed.
Workshop 13 – (Sessions A, B & C) Appeals	1/7/2016, 1/12/2016 and 1/20/2016	Discussed and developed process flows, identifying activities and the sequence/inter-relationships between activities. The Appeals process was decomposed, from intake through to resolution.
Capstone session for Functional Requirements Review	1/14/2016	Key State stakeholders reviewed and provided feedback on the documented business process flows and functional requirements, including requirements for workflow management capability (common to multiple processes).

I.2 WORKSHOP PARTICIPANTS

Workshop participants and organizations responsible for providing future state information and collaborating in the definition of business processes and requirements included the following individuals.

Section intentionally left blank.

APPENDIX J: STRUCTURE OF BUSINESS OPERATING MODEL

This appendix provides an introduction to the types of models used to create the business operating model. The structured approach supports the program strategy to develop reusable HCFA architecture artifacts during the lifecycle of MMP projects. Detailed information regarding models is contained within the EA-BOM Plan, document A.17 in the Proposer’s Library.

J.1 BUSINESS CONTEXT MODEL

The Context Model establishes the focus and framing for design conversations. It provides an initial opportunity to create agreement with respect to the scope and focus for modeling purposes.

The Context Model shows the “Enterprise in Focus” as a single, black box entity. All major stakeholder groups are shown around the Enterprise (in this case, TN HCFA), using the following typical conventions:

- Clients/Customers to the right
- Suppliers/Vendors to the left
- Business Partners beneath
- Governors/Regulators on top

The major functional roles played by the Stakeholders with the Enterprise are shown as interaction arrows on the diagram.

J.2 OPERATING MODELS

The Operating Model opens up the black box of the Context Model to reveal the business functions inside the enterprise in focus. The business functions are shown as “nodes” on the Operating Model and the diagram depicts the major internal interactions required to support the external interactions with Stakeholders.

The business functions are generally organized into three major groups:

- Core Business Functions in the center of the model.
- Service Delivery Functions on the right side of the model.
- Shared/Common Management Functions on the left side of the model.

Operating Models are used to confirm identification of all the major business functions, and traces the major interactions between those functions from end-to-end.

J.3 BUSINESS PROCESS MODELS

Business process models are a graphical depiction of a business flow that documents the organizational roles and integrates the work sequence across organizational boundaries. They are commonly referred to as “Swim Lane Diagrams.”

Business Process Models depict the behavior of the business in response to a trigger event (e.g., an application for healthcare). It shows the trigger event, roles that respond to the trigger event, the sequence of processes performed by the roles, and the final goal/outcome. The final goal may subsequently trigger other events until the entire work sequence is completed, delivering value to one or more stakeholders.

Business Process Models contain organization roles, activities (tasks) and flows, including other element details such as events, decisions and alternative (or parallel) paths. Because of the complexity of processes, the business model is divided into sublevels, each of which is decomposed into successive levels of detail. The levels are:

- Level 0 – An abstraction of the overall eligibility-related process operations
- Level 1 – High-level process flow
- Level 2 – Detail task flow within a group or unit
- Level 3 – Specific functionality, which may be used to support multiple activities

Critical to system design is the level of automation that is required for each activity:

- Fully automated tasks are required to be performed by the system without needing any worker intervention.
- Semi-automated tasks will be realized through SI’s multiple related system use cases.
- Other tasks are performed external to the system or are manual tasks that are not in-scope to be automated.

J.4 FUTURE STATE ARCHITECTURE

The TAS consultants created the initial version of the Conceptual Architecture Design based upon industry knowledge and CMS requirements. Using input from key HCFA staff, the TAS consultants utilized a structured workshop approach to gain an understanding of HCFA’s needs and technological environment and to define a future state of business and technical capabilities.

The Business Architecture Conceptual Future State frames the major features of the planned system, identifying the functions that will fulfill HCFA’s vision and guiding principles.

The Future State is defined as a result of the gap assessment between Current State and:

- KERA capabilities that are industry standard for state-level MMP enterprises¹⁶,
- MITA 3.0 & CMS' Seven Conditions and Standards,
- Resolution of Issues (as identified by key stakeholders),
- Vision of streamlining of business processes to enhance member-perceived value, timeliness and determination accuracy, and
- Goal of enhancing supervisory ability to manage workflows and audit work performance.

After the future state was modeled and assessed using the structured approach, then the future state roadmap was developed to plan the modernization across multiple projects and initiatives. The Roadmap document is an independently maintained planning artifact, updated as the project progresses through design and implementation releases.

¹⁶ The Reference Model takes into account the requirements of the Federal References Models (CMS and MITA), and is maintained as updates to these model are published, providing a single Reference Model for alignment.

APPENDIX K: KERA SOFTWARE SERVICE DEFINITIONS

Section intentionally left blank.